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ROYAL COMMISSION OF INQUIRY INTO CERTAIN DEATHS AT THE HOSPITAL FOR SICK CHILDREN AND RELATED MATTERS.

Hearing held 8th floor 180 Dundas Street West Toronto, Ontario

The Honourable Mr. Justice S.G.M. Grange

P.S.A. Lamek, Q.C.

E.A. Cronk

Thomas Millar

Commissioner

Counsel

Associate Counsel

Administrator

Transcript of evidence for

November 22, 1983

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## OFFICIAL COURT REPORTERS

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| 1        | ROYAL COMMISSION OF INQUIRY INTO CERTAIN   |  |  |  |  |
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| 2        | DEATHS AT THE HOSPITAL FOR SICK CHILDREN AND RELATED MATTERS.  |  |  |  |  |
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| 4        | Hearing held on the 8th Floor,   |  |  |  |  |
| 5        | 180 Dundas Street West, Toronto,<br>Ontario, on Tuesday, the 22nd<br>day of November, 1983.  |  |  |  |  |
| 6        | The state of the s |  |  |  |  |
| 7        |  |  |  |  |  |
| 8        | THE HONOURABLE MR. JUSTICE S.G.M. GRANGE - Commissioner  |  |  |  |  |
| 9        | THOMAS MILLAR - Administrator  |  |  |  |  |
| 10       | MURRAY R. ELLIOT - Registrar   |  |  |  |  |
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| 22       | F. KITELY Counsel for the Registered Nurses' Association of Ontario  |  |  |  |  |
| 24       | and 35 Registered Nurses at<br>The Hospital for Sick Children  |  |  |  |  |
| 25       | (Cont'd)   |  |  |  |  |



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| 6   | B. KNAZAN        | Counsel for Mrs. M. Christie - R.N.A.   |
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| 9   |                  | Inwood, Mr. & Mrs. Turner, Mr. & Mrs. Lutes, and Mr. & Mrs. Murphy (parents of deceased children) |
| 10  |                  | Children  |
| 11  | F.J. SHANAHAN    | Counsel for Mr. & Mrs. Dominic<br>Lombardo (parents of deceased<br>child Stephanie Lombardo); and |
| 12  |                  | Heather Dawson (mother of deceased child Amber Dawson)  |
| 13  | J. SHINEHOFT     | Counsel for Lorie Pacsai and<br>Kevin Garnet (parents of  |
| 14  |                  | deceased child Kevin Pacsai)  |
| 15  |                  |   |
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--- Upon commencing at 10:00 a.m.

THE COMMISSIONER: I do have copies of this for everyone, but I found a mistake at the last moment and that is now being corrected and as soon as it is ready it will be down.

This Commission is charged with the task of determining how and by what means some 36 babies who died at the Hospital for Sick Children came to their death. It is possible that the evidence may justify a conclusion that some person or persons contributed to those deaths. The problem that is raised here is how compliance with Section 5(2) of the Public Inquiries Act, R.S.O. 1980, Chapter 411 can be effected. That section in full reads as follows:

5. -(1)
Rights of
persons
interested

A commission shall accord to any person who satisfies it that he has a substantial and direct interest in the subject-matter of its inquiry an opportunity during the inquiry to give evidence and to call and examine or to cross-examine witnesses personally or by his counsel on evidence revelant to his interest.



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2.1

Rights of persons before misconduct found

No finding of misconduct on the part of any person shall be made against him in any report of a commission after an inquiry unless that person had reasonable notice of the substance of the misconduct alleged against him and was allowed full opportunity during the inquiry to be heard in person or by counsel. 1971, c.49, s.5.

I will deal briefly and very generally with the background to the problem. Some of the facts may well be inaccurately stated for the Inquiry has not yet reached a stage where detailed evidence of the whereabouts and conduct of the persons concerned is presented. The facts as they appear and as they appeared at the commencement of the Inquiry are as follows:

of the 36 babies whose deaths are under investigation, ten died in March 1981 culminating in the death of the infant Justin Cook in the early hours of the morning of March 22nd. The nursing care of the babies in given wards at the Hospital for Sick Children was often entrusted to teams of nurses captained by a team leader. It was noted at or about the time of Justin Cook's death



that many of the babies who had recently died had been in the care of 1 or more of the members of a particular team and that team was on the night of March 22nd relieved of duty. That team consisted of the following:

Phyllis Trayner - R.N. Team Leader

Susan Nelles - R.N.

Sui Scott - R.N.

Marianne Christie-R.N.A.

The latter, i.e. Miss Brownless appears not to have been a regular member of the team but to have floated between that team and others. In any event, it appeared to me that if anyone were likely to be found to have caused or contributed to the deaths of any of the children it would be one or more of the members of that team. Indeed Susan Nelles had already been charged with the murder of 4 of the infants but had been discharged at the end of the Preliminary Inquiry.

Janet Brownless - R.N.A.

At the commencement of the hearings,

I granted standing to each of the members of the

team and recommended that they be funded by the

Province for their legal fees incurred - a

recommendation that was accepted. Counsel for some



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have attended with unfailing regularity; Counsel for others regularly and for one rarely. They all however have been entitled to attend, to crossexamine witnesses and generally to participate in the hearings, which to date have extended over 60 days. Their Counsel have also been given to date at least in summary form all the relevant and admissible evidence available to the Commission linking their clients to the deaths of these children. Perhaps the most cogent of that evidence is a document referred to as the Atlanta Report, being a report prepared for the Minister of Health by persons in his ministry and persons in the Centers for Disease Control in Atlanta, Georgia. That report in unexpurgated form (it has not yet been tendered before the Commission), was presented to Counsel for all the team members except Miss Brownless. The fact that it was not presented to her Counsel may fairly be taken to mean that we do not think the report contains any evidence adversely affecting her.

My purpose, which I think should have been obvious to everyone, was not only to be fair to the persons concerned in giving them an opportunity to deal with the evidence as it arose but also in the interest of the Commission to obviate any need



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to repeat testimony which might adversely affect any person who had not been present when it was given and therefore unable to probe that evidence on cross-examination.

I thought the procedure and the purpose for it were perfectly plain but I found it necessary to restate it on two occasions, once after a motion by Mr. Sopinka, and once after receiving a letter from Mr. Olah. On the first occasion I said:

"I cannot imagine that there could ever have been the slightest doubt as to why each member of the Trayner team is here represented by Counsel funded by the Province. If such a doubt has ever existed, let me make it now quite clear that each of them may be found to be implicated either by accident or with deliberation in the deaths of the children. I emphasize that to date very little of such evidence has been presented but it is anticipated that some evidence will be tendered and of course Counsel for the parties concerned will be entitled during the hearing to be heard and to adduce evidence relevant to the issues before this Commission."

In the letter Mr. Olah referred to correspondence he had had with Mr. Lamek, Counsel to the Commission, which indicated that the Commission knew of no evidence at the time implicating his client in the deaths of any of the children. Mr. Olah went on to require inter alia particulars of the misconduct alleged against his client, an adjournment of the Commission to consider his client's position and a possible recall of all of the witnesses. I replied





as follows:

"I don't believe there is any strict rule requiring it, but we have given Mr. Olah and all other Counsel concerned the substance of the evidence that we intend to adduce respecting any possible misconduct on the part of their clients. therefore, no particulars to provide.

"We may or may not give a special notice to any person under Section 5(2) of the Public Inquiries Act. We may also at some point reach the conclusion that there is no possibility of a finding of misconduct against a particular person. In that event, we shall notify the person concerned and recommend that public funding of Counsel cease.

"Obviously, if any additional evidence should come to hand it would be fair to pass it on to the person concerned and that is our intention. cannot be sure, however, that incriminating evidence will not be revealed for the first time in testimony and Counsel must be prepared to deal with such evidence as it arises.

"It is not our intention to recall any witness unless it can be demonstrated that he has fresh relevant evidence to give. Nor is it our intention to adjourn the hearing to permit counsel to consider his client's position. It is my view that he should have been considering that position from the beginning and should have kept it constantly under review."

In short what I was trying to say was that in pursuance of my mandate I was investigating the cause of death of the children and it might be that, after all the evidence was in, some person represented at the Inquiry might be implicated.

It is now argued that the procedure does not comply with Section 5(2) of the Inquiries Act. I must confess I do not understand the argument, at least as it applies to the procedure adopted, at all.

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What does not seem to be appreciated is that until all the evidence is in, we cannot know whether misconduct will be alleged against any person and whether full opportunity has been or may be allowed to that person to reply. It may be that no misconduct will be alleged and that of course will be the end of the matter; it may be that I will consider that misconduct may be found against some person; if so I will have to consider whether that person has had adequate notice and opportunity to be heard; if I decide that he has not, I will have to take appropriate steps. If I decide that he has, no further steps will be necessary.

to ensure that the proceedings will be fair and that there will be as little need for duplication of evidence as possible. It may develop that I have already complied with Section 5(2). Some further action may be needed. It is my hope, however, that the procedure adopted will make such further action if needed relatively easy and painless. I repeat that it may also develop that Section 5(2) will not come into play at all for some (or indeed all) of the persons represented at the Hearing. Mr. Olah seems to be asking me to come to that conclusion now for his client. That I cannot do until all the evidence has been heard.





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Mr. Olah's present motion is for a ruling that such notice as has been given is invalid for lack of particularity, in the alternative for particulars and in any event that no notice can be given to his client, presumably at any time. For the reasons I have given the motion in all its aspects is premature and must be dismissed.

Now, that is all I have to say on that, and it concludes all of the outstanding matters except the police report, have you anything for us on that, Mr. Young?

MR. YOUNG: Mr. Commissioner, we are presently trying to develop an expurgated version of the report pursuant to our discussions and we hope to have the answer for you within a week.

THE COMMISSIONER: Yes, that will be resolved. Does anyone else have any comments. Yes, Miss Kitely?

MS. KITLEY: May I rise on that point to repeat what I indicated 10 days ago; that was if some resolution is being reached on that issue between Counsel that all Counsel that were not at the meeting have an opportunity to make submissions?

> THE COMMISSIONER: What sort of



submission did you have in mind making, that you would like to ---

MS. KITELY: I have concerns that an expurgated copy of the report is going to be made available.

THE COMMISSIONER: You see, I can't make available a non-expurgated portion without letting you see the part that is expurgated, it is impossible.

MS. KITELY: I am concerned about what is going to be given.

the stuff that is not going to be given is not going to be relevant to anything. If it is relevant, or admissible and if it would be ever used by me or by Commission staff it will be included. But if it isn't, and there is an awful lot I am afraid in police reports that is not, and I can't let you see it, there is just no possibility because if I let you see then the ---

MS. KITELY: That is not what I am on my feet for, sir. I raised the concern 10 days ago when the meeting was being held from which I was excluded. All I wish to register again is if a decision is being made I would like to make a submission.



THE COMMISSIONER: None of the other counsel has seen any of this part that is expurgated either.

MS. KITELY: I understand that, sir.

I am just concerned if a decision ---

THE COMMISSIONER: Tell me how can I do it.

MS. KITELY: I am concerned, sir, that if a decision is being made by two counsel without ---

THE COMMISSIONER: I am sorry, it is made by me, it is not being made by Counsel. They are the people that were most concerned, but what is it you want to say because if there is something you want to say about it just let me know.

MS. KITELY: In my submission this is not the right time to commenting on it. I only rose because Mr. Young said efforts were being made and I didn't want the Commission to decide - I register the concern that I registered 10 days ago.

THE COMMISSIONER: Miss Kitley, I
don't know how it can be done, how can it be done?
What do I do, do I let you see the whole police
report and then you say, I don't think this is proper
to expurgate in this way, is that what you want? -



because that is the only thing I can do. All I can do is put it to Mr. Young and Mr. Percival. You tell me if there is a form of this report that will be satisfactory to you and then if it comes to me and to Mr. Lamek and we are satisfied that it does not exclude any evidence that is relevant and admissible then we will agree to it, but otherwise the only other way it could be done is to let you see the whole report, and that is what I don't think should happen. Just tell me, just tell me how you can do it? You can't do anything more than just tell now you would like the whole report, is that what your submission is?

MS. KITELY: No, that is not my submission, it has never been my submission.

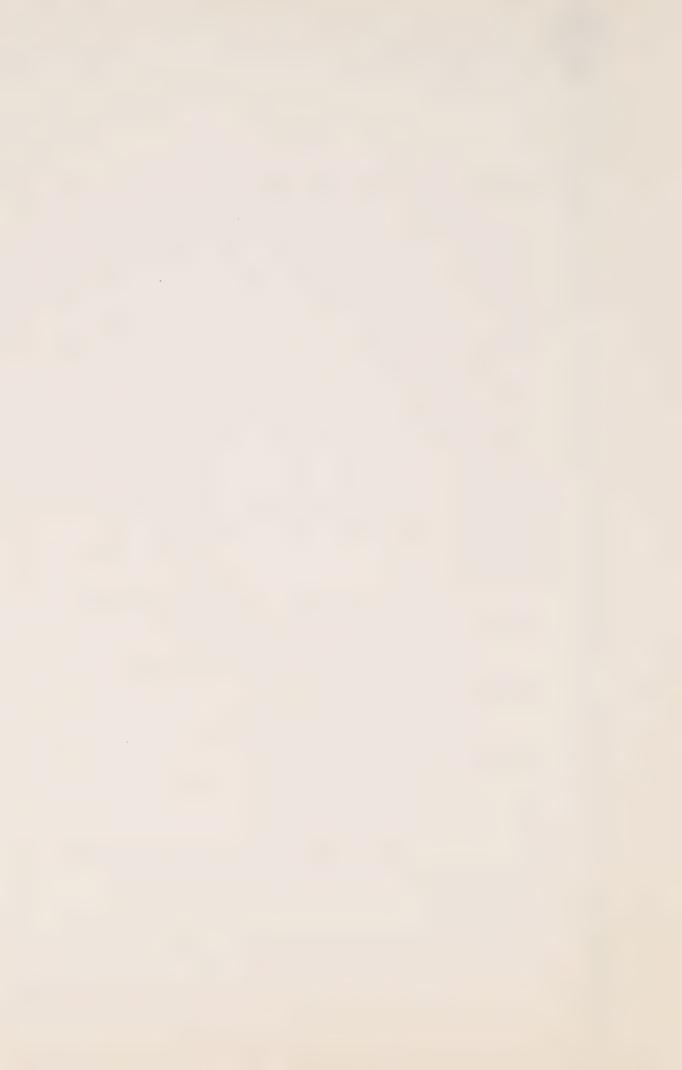
THE COMMISSIONER: All right, what is your submission.

MS. KITELY: Since I have not seen the report ---

THE COMMISSIONER: And you won't see it.

MS. KITLEY: Since the Commissioner has indicated I won't, I have to make certain assumptions.

THE COMMISSIONER: Yes.



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that.

MS. KITELY: And the assumptions I make are that there are certain statements attached to the report and those statements are either sworn, unsworn, signed or unsigned, or are versions of taperecordings. In my submission most of those statements ought not to be released to anyone.

THE COMMISSIONER: Yes, I agree with

MS. KITELY: That has been my concern all along.



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THE COMMISSIONER: Well, is it your concern to keep, to suppress the report, because if that is so we are working in the same interest.

 $$\operatorname{MS.}$  KITELY: I would like not to use the word "suppress".

THE COMMISSIONER: All right.

MS. KITELY: There is valid reason, given some of those statements that we have seen on behalf of our clients, and the inaccuracies of those statements.

THE COMMISSIONER: Yes.

MS. KITELY: And in my submission they ought not to be made public.

THE COMMISSIONER: Well --

MS. KITELY: There would be serious

prejudice if that were --

THE COMMISSIONER: I am with you on

MS. KITELY: Thank you.

THE COMMISSIONER: All right. Anyone

else?

that.

Yes, all right, Miss Cronk?

MS. CRONK: Thank you, sir.

Mr. Commissioner, our next witness is

Dr. John Fay. I would ask him to come forward.



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DR. JOHN E. FAY, Sworn

DIRECT EXAMINATION BY MS. CRONK:

Q. Dr. Fay, please try and make yourself comfortable in the space that is permitted there.

Doctor, as I understand it you are at present an Associate Professor in Medicine and Paediatrics at Queen's University in Kingston, Ontario. Is that correct?

A. Yes.

Q. You have held that appointment since 1969 continuing to date?

A. 1960.

Q. 1960, I am sorry, sir. And you obtained your medical degree as I understand it at the University of London, England, in 1949, where you graduated with honours and distinction in Medicine.

Do I have that correctly?

A. Yes.

Q. In 1950 you started as a demonstrator in the Department of Physiology at Charing Cross Hospital Medical School in England?

A. Yes.

Q. And in the years 1951 to 1954 you served in the Royal Naval Medical Service in a variety of positions?



| A. | Yes. | , |
|----|------|---|
|----|------|---|

Q. You then returned as I understand it, Doctor, for a period of six months in 1955 to Charing Cross Hospital Medical School as a research assistant in the Department of Physiology. Do I have that correctly?

A. Yes.

Q. And then commencing in July, 1955, you served for one year as an assistant resident in Internal Medicine at the Hospital of St. Raphael, New Haven, Connecticut?

A. Yes.

Q. And the following year from July, 1956 to June, 1957, you served as a Fellow in Cardiology at University Hospital at the University of Saskatchewan here in Canada?

A. Yes.

Q. The year after that, as I understand it, Doctor, you completed a one-year assistant residency at the same hospital in the Department of Medicine?

A. Yes.

Q. From August, 1958 to July of 1959 you served as a Research Fellow at Queen's University, again in Kingston?





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|---|----|
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(2)

yes.

|         | A.      | •    | That | was | a | National | Research |
|---------|---------|------|------|-----|---|----------|----------|
| Council | Fellow, | yes. |      |     |   |          |          |

Q. And then as I understand it,
Doctor, you joined The Hospital for Sick Children here
in Toronto as a Cardiology Fellow in September of 1959
where you remained until February, 1960?

A. That was a McLaughlin Fellowship,

Q. You then joined the staff of the Medical School Faculty at Queen's University at Kingston and have remained a member of the staff to date?

A. Yes.

Q. Thank you.

Doctor, as I understand it in addition to your teaching and acamdemic responsibilities you maintained a private practice in medicine and are currently associated with the Kingston General Hospital?

A. Correct.

Q. Can you describe for us briefly,
Doctor, the nature of your duties as an attending
staff member at the Kingston General Hospital in
Kingston?

A. Yes. I am a member of the attending staff at Kingston General Hospital in the



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Department of Medicine and in the Department of Paediatrics. Also I see patients who are referred to me both adult and children.

I have a ward service. I admit both adult patients and children to the ward, and I am involved in the Coronary Care Unit. That is basically my clinical responsibility.

> Thank you, Doctor. 0.

Doctor, in terms of your association with the Department of Medicine per se at Kingston General Hospital is that in respect of the Division of Cardiology?

Yes. I am a member of the A. Division of Cardiology of the Department of Medicine.

All right. And as well, Doctor, you told us that you are an attending physician at that hospital in the Department of Paediatrics? Is that as well in the Division of Cardiology?

No. There is a small Division A. of Paediatric Cardiology in the Department of Paediatrics.

And that is the Division to Q. which you are attached?

Also, yes.





Q. Doctor, as I understand it you have, of course, a number of professional interests, a number of professional memberships, and for example as I understand from 1974 to April, 1981, you were the Queen's representative to the College of Physicians and Surgeons of Ontario?

- A. Yes.
- Q. Do I have that correct?
- A. Yes.

Q. Doctor, from April, 1978 to May, 1979, you served as President of the College of Physicians and Surgeons of Ontario. Do I have that correctly?

A. Yes.

Q. And you are presently, as I understand it, Doctor, the Queen's Faculty of Medicine representative to the Medical Council of Canada?

A. Yes.

Q. Doctor, there are - you have alerted me and informed me as to a number of other professional affiliations and are areas of interest in the practice of medicine, and as well to a number of publications which you have authored or co-authored. You have been kind enough to provide to me a copy of your curriculum vitae.





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Rather than reviewing them in detail I would ask you simply to look at this copy of your CV and identify it if you can for us.

A. Yes, that is mine.

MS. CRONK: Thank you, Dr. Fay.

May that be the next exhibit, Mr.

Commissioner?

258.

THE COMMISSIONER: Yes. What number?

--- EXHIBIT NO. 258: Copy of Curriculum Vitae of Dr. John E. Fay.

MS. CRONK: Q. Doctor, you are of course aware that this Commission is concerned to determine the cause of death of some 36 children who died at The Hospital for Sick Children during the period June 30, 1980 through to March 22, 1981 on the cardiology wards of that Hospital or elsewhere having been transferred from the cardiology wards shortly before their death.

Some time after March 22nd, 1981,

Dr. Fay, were you asked to review the medical records

of the children who had died on or shortly after

leaving the cardiology Wards 4A and 4B at The

Hospital for Sick Children?

A. Yes. I can't say exactly when it was that Dr. Ross Bennett phoned me in Kingston. I



think it must have been May or June of 1982, and he asked me if I would be prepared to survey a number of charts of children who had died on the cardiology service of The Hospital for Sick Children between certain dates - he didn't say exactly how many charts - with a view to giving opinion as to whether digitalis intoxication had been contributory or the cause of any of the deaths of these children on the cardiology service.

Q. Thank you, Doctor.

If I can perhaps take that in stages then, Doctor, as I understand it you were requested, you have told us, to undertake this review by Dr. Ross Bennett of the Coroner's Office?

A. Yes.

Q. And to the best of recollection

I think you said you thought it was in May or June of
1982?

A. It must have been in May or June because I know that Dr. Bennett was anxious that I should attend a meeting which was slightly inconvenient for me in terms of other commitments, and I did manage to get to that meeting which was at the Police Headquarters here in Toronto. And I think that meeting was some time in June. So probably it was early June



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or late May. I can't really remember accurately. I could probably get the accurate date from my diary but I can't remember now exactly when it was.

Q. Doctor, I take it you are aware of the fact that a nurse from The Hospital for Sick Children was charged with the murder of four children who had died on the cardiology wards between the period July, 1980 to March 22nd, 1981; a preliminary hearing was held in respect of those charges and that that nurse Susan Nelles was upon the conclusion of the preliminary hearing discharged. I take it you are aware of that?

A. Yes, I knew what I had read in the papers and heard on the news reports.

Q. Yes. Doctor, can you help us with this, Doctor: at the time you were contacted by Dr. Ross Bennett to undertake this review as best you can recall it had the preliminary hearing with respect to Susan Nelles been completed? Had she been discharged, or do you recall?

A. I think she had been discharged by that time. I think so.

Q. And, Doctor, could you help me again if you would as to what you understood the purpose of the review to be that you were being asked to undertake?





TORONTO, ONTARIO

B.10

A. Well, I understood that there was an ongoing interest on the part of the police in these deaths, and that the chief coroner had asked me to participate as an independent cardiologist for the purposes of his office, I presume.



22nov83 C BMcra I was given no written instructions.

I didn't have any prolonged briefing, in fact, I

didn't have any briefing from Dr. Ross Bennett

other than the phone call which asked me to attend

the meeting and then I was shown the charts and I

just go on with it from there.

Q. All right, Doctor, I take it then, or perhaps I should ask you, were you, be it by Dr. Ross Bennett or any other, asked to do specific things in the course of that chart review?

A. No, I don't think there was any direction or any suggestion about specifics.

I think it was taken that I would review the charts and form an opinion and report back to Dr. Bennett and the Crown Attorney's office. I think that was the general gist of it. But again I was given nothing in writing, no directions.

what you had said earlier, would I be fairly suggesting to you that insofar as you understood the matter it was the intention that you were to review these cases to assess in your opinion whether or not digitalis or digoxin had played any part in the deaths of the children whose charts you would



stood.

be reviewing? Have I stated that fairly?

A. That is what I had under-

Ω. All right. And as a result of that review, Doctor, as I understand it you prepared certain written case summaries regarding each child whose record you had reviewed together with certain handwritten notes based on your review of the charts; is that correct?

A. Yes. I went to The Hospital for Sick Children where the charts were available in one room and I surveyed, I forget the exact number, something in excess of the charts that we have here and I made notes as I reviewed them.

Ω. All right. Doctor, do you have today with you a copy of the case summaries and the handwritten notes which you prepared?

A. Yes, I have this here.

ensure that we are looking at the same material, if you could turn to the body of the brief there is an index setting out the names of certain children and if we turn to the contents of the brief we see with respect to each child a document entitled "Case Reviews" by Dr. John Fay " that is in a type-written form. Are those the case reviews which were



prepared by you, Doctor?

A. The typed case reviews were dictated from my notes. They were really the last thing I did in connection with this task I had to do. They were prepared at the, I'm not sure the title of the place but it is the Homicide Office of the Toronto Police Force.

Q. All right. And did you dictate these case reviews based on your notes and your review of the charts, Doctor?

A. I dictated them based on the review of my notes which had been taken some time previously.

Q. All right. Doctor, we see in each case behind the typewritten case review a series of handwritten notes particular to each involved child. Are these your handwritten notes?

A. These are my notes which were made in The Hospital for Sick Children at the time I was actually reviewing the charts. I made them as I reviewed the charts.

Ω. Thank you, Doctor.

Mr. Commissioner, might that be

the next exhibit?

THE COMMISSIONER: Exhibit 259.



C4 2

--- EXHIBIT NO. 259: Document entitled "Case Reviews by Dr. John Fay".

MS. CRONK: Q. Dr. Fay, you have told us with respect to the typewritten versions of the case reviews that you dictated these reviews on the basis of the chart review which you had undertaken and your handwritten notes. Did you, after dictating them, have an opportunity to review the typewritten version once it had been prepared?

A. When I say I dictated them,
I think in retrospect I actually wrote these out
longhand from my notes and then it was typed.

 $\Omega$ . I see.

A. I did not - no, I did not review this after. That was the completion of my work and I did not review anything and I did not see any of my notes or the typed accounts until you handed them to me last week, which is something in excess of a year since I completed that job.

Q. Well, I understand the difficulties that then may be attached to the process, Doctor, but I appreciate your assistance as best as you can based on your recollection of these materials as we go through the case of each child.



I would ask you first, if you would, to turn to the index to the case review, which I say immediately was prepared by Commission Staff and which identifies some 36 children with whom this Commission is concerned. As I understand it and as you have mentioned a few moments ago, you in fact reviewed the medical records of more than 36 children who had died at The Hospital for Sick Children. Do I have that correctly?

A. Yes. In fact, I think the first 16 or 18, maybe 15, 16 charts I reviewed were post operative deaths in the immediate post operative period. I think most of those charts, it was fairly obvious from a review of the charts these children had died in the immediate post operative period and it may be that it is the bulk of those charts which form the residue, if you like, of the charts that I did review because there were more than 36. I can't remember the exact number.

Q. Thank you, Doctor. I take it, though, with respect to the names set out on this index you did in fact review the medical record of each of these children?

- A. Every one.
- Q. Thank you, Doctor. Doctor,



insofar as I am aware, you were not asked nor did you prepare an overall summary section summarizing your conclusions with respect to these 36 children?

Do I have that correctly?

A. Yes. There is nothing more than you have here with regard to these 36 children.

O. All right. As we will see, Doctor, as we move through the individual case reviews, however, you did attempt in each case in outlining your remarks to categorize each case according to whether or not digoxin intoxication was in your opinion a possible contributing factor.

I would ask you, for example,
Doctor, to turn first, if you would, to the case of
Allana Miller by way of illustration at page 98.

A. Yes, I have got that.

you, Doctor, that it appears that in categorizing each of these 36 cases you have used several different forms of language to describe the various possibilities and by way of illustration I draw your attention first to your conclusion with respect to Allana Miller and I tell you quickly that I will have further questions in due course to ask you about the case of Allana Miller but, for present purposes, you



have indicated in the last sentence on page 98:

"There is, therefore, a high
suspicion of digitalis toxicity in
this case."

Without dealing with the particulars of the case, Doctor, I take it then that there were in fact some cases like that of Allana Miller where you concluded and offered the opinion that there was a high suspicion that digoxin had been involved or contributed to the death of the involved child?

Do I have that correctly?

A. Yes. I would say there were a few, a very few, in which there was this, if you like, high suspicion. There were a number of gradings used and this comes out as I go through my notes again. There were the gradings that I had given as probable, or most probably or highly likely, and I varied my language because I wasn't going according to a set piece; I was just trying to get as much information as I could from the chart to form the opinion that I had been asked to give, and there were other gradings that had been used which I became acquainted with that dr. Hastreiter had used as again a good possibility or probable and then there were other gradings that I became



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acquainted with later on that the Police Department used, as A, B or C, or whatever, but there were a number of gradings mixed up and I see some of them coming through from time to time in my notes.

Q. Well, Doctor, dealing with your own classifications or classifications if you will of these deaths, can you help us in general terms with what you meant when you indicated in any given case that there was a high suspicion of involvement of digoxin?

at the anatomic diagnosis but I wasn't looking at the chart from the point of view of management of the child with heart disease. That would have been out of place, really. I mean, it wasn't a question of that. I was looking at whether the child had had digitalis and, if so, whether the dosage had been appropriate, what the mode of death was in terms of particularly cardiac arrhythmias or any symptoms such as vomiting which might have indicated digitalis excess and then, of course, in the last analysis always any toxicology that I had, either serum digoxin levels taken just prior to death, which there were in a few cases, or serum digoxin levels, blood digoxin levels or tissue levels obtained after



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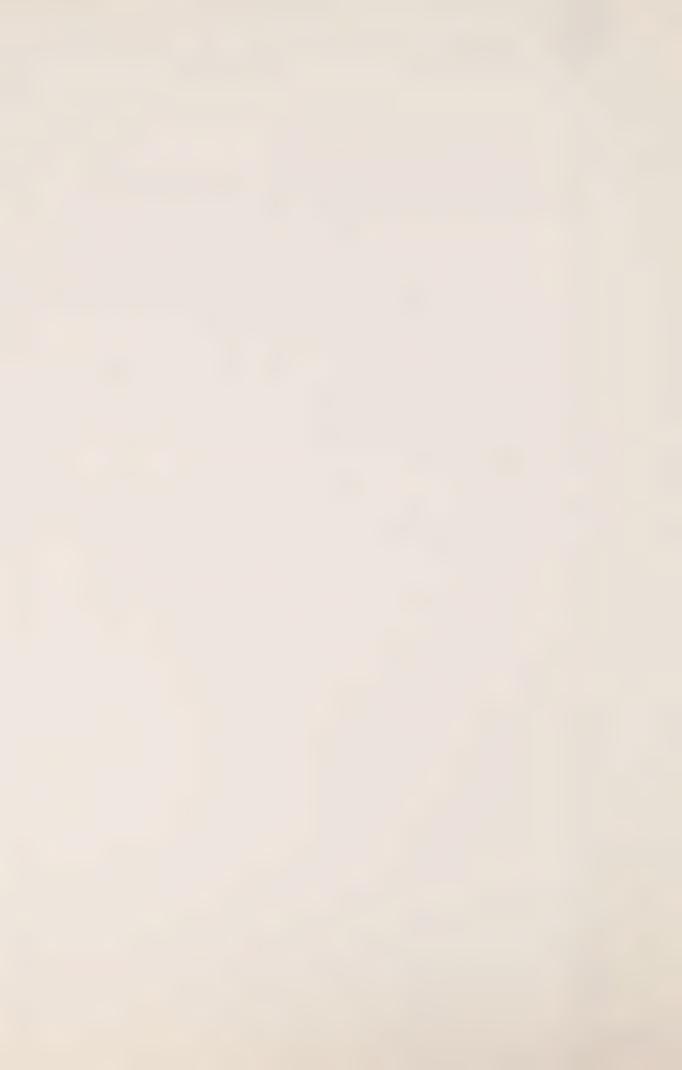
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death and which I was supplied with through Mr. Cimbura, the toxicologist, at his office.

So, that was the way I was looking at it and that was the way I formed my opinion as to the probability, the possibility or the improbability of digitalis having played a part.

0. All right. Well, Doctor, perhaps my question will become clearer if we turn to page 82 of your case reviews, to the case of Jordan Hines.

Again by way of illustration we see there, Doctor -- I'm sorry, do you have that? Yes, I do. Yes.



D/DM/ak

Q. In the concluding sentence of that case review, again without dealing with the particulars yet of this child's case you indicate:

"...certainly in this case digoxin toxicity is a good possibility as because of the terminal event."

I suggest to you, Doctor, that there is a difference in language between the conclusionary remark you made in the case of Allana Miller, where you described the possible involvement of digoxin intoxication as being a high suspicion; in the case of Jordan Hines where you describe it as being "a good possibility". Was it in your mind a distinction which you were drawing in classifying various cases under either of those two categories.

A. Yes. I think that in the first case of Allana Miller the toxicology was such that it seemed to me to be very, very highly suggestive of digitalis intoxication in that case; 70 nanograms per millilitre.

In the case of Jordan Hines it was a little difficult. This child had a normal heart anatomically, thought to have the Sudden Infant Death Syndrome and was septic. On the other hand there was a good record of an arrythmia. There was



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a suggestion of a sick sinus syndrome which means that the pacemaker of the heart is abnormal and can occur in young babies, but there was nothing as persuasive really as in the case of Allana Miller.

However, the disturbing feature was that we had a report - we had a report of digoxin

I think from the toxicologist, I think that is correct

Q. Well, Doctor, to help you if
I may; my question merely is this, would it be fair
to suggest - I am sorry, would it be fair for us to
conclude having regard to the difference in language
that was employed, for example, in the case of Allana
Miller as compared to the case of Jordan Hines that
you placed the probability of digoxin intoxication
being involved in the death of Allana Miller on a
higher threshold than you did in the case of Jordan
Hines?

- A. Yes, I did.
- Q. Doctor, there appears to be a third form of language, if you will, and I would ask you to turn to page 8 of your case reviews, the case of David Taylor and that is closer to the front of the book, Dr. Fay.
  - A. Yes.
  - Q. Page 8.



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Q. Do you have that, Doctor?

"Although this child has severe

- A. Yes.
- Q. Doctor, in this case, for example, your concluding sentence indicates, and again without dealing with the specifics yet of the case, you indicate:

congenital heart disease there is a suspicion of digitalis overdosage."

Once again, Doctor, that is language different than that employed in the case of Jordan Hines, where you described it as a "good possibility"; it is language different than that which you employed with Allana Miller where you described that case as being "a high suspicion" case.

Can you help me as to what you meant in describing certain cases as being "suspicious" without further statement, or "a possibility" without further statement?

A. Well, here was a child who had digitalis ---

THE COMMISSIONER: Doctor, I don't think that was quite the question.

THE WITNESS: Yes.



really this is a semantic question, it is not a medical question. Do you mean by, would you rate them "suspicion" at the lowest; "good possibility" up the line; and "high suspicion" up further still, that's all. We are really just asking you what you mean by the terms?

THE WITNESS: Well I think I would not rate this as "a high probability".

THE COMMISSIONER: No, no, we will get into that afterwards.

THE WITNESS: All right, okay.

THE COMMISSIONR: Am I correct that if you say there is a suspicion of digoxin poisoning, or toxicity, that in your mind means that it is less likely than if you say there is a good possibility, and that is less likely still than if you say there is a high suspicion, do I have them rated in the right way?

THE WITNESS: Yes, I think suspicion really means quite a soft area.

THE COMMISSIONER: Yes.

THE WITNESS: I am sorry that I am not being more specific but it is very difficult and I really have not had a chance to go over these for



over a year. In fact I never did see them again after I dictated that final note, or wrote that final note. I think suspicion is very soft. If I really feel that it is at all likely I think I'm using the word "probable". "Probable" means I have a high suspicion there is a good probability, but suspicion in this context here I think can be very soft.

THE COMMISSIONER: Would you put "good possibility" somewhere in the middle.

THE WITNESS: Somewhere in the middle, but I do think aside from the "probable" or the "highly suspicious" the rest tend to go from one category to another a little and I can't be sure.

MS. CRONK: Thank you, Doctor, thank you, Mr. Commissioner.

THE COMMISSIONER: Yes, all right.

Q. My questions may have been a bit cumbersome and for that I apologize. It appears to me on the basis of a review of your case reviews there is another form of language still and that is that there are a group of cases where you have described the possible involvement of digoxin intoxication as being a very low possibility, or unlikely. There are cases as well that you categorize in that fashion, Doctor.



D6

| A. Yes. Excuse me, your questions                     |
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| are not cumbersome, the whole matter of the review of |
| these charts is extraordinarily cumbersome, because   |
| I am doing it in isolation. It is not as though I     |
| was looking after the children at all. I am looking   |
| back from a specific point that I have been vectored  |
| to look at the charts from a specific standpoint,     |
| and it is very difficult in the majority, as I have   |
| said to the Commissioner, to be really very positive, |
| or sound very positive and those that I really was    |
| suspicious or highly suspicious, I should say, I have |
| used the word "highly suspicious" or "probable" and   |
| I think that should differentiate that group from     |
| the others.   |

Q. Thank you, Doctor, we are grateful for your assistance. Doctor, as I understand it there are as well a number of cases where you felt and categorized the deaths to be explicable by natural causes. There are a number of those cases as well, do I have that correct?

A. Yes. Many of the children had very severe congenital heart disease, and many of them had abnormalities which it is recognized most frequently lead to death within a short time, a few days or a few weeks of birth.



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Q. Thank you, Doctor. Doctor, I recognize that as I suggested to you earlier that you were not asked nor did you prepare a summary version of these categorizations. Commission staff has prepared one on the basis of your conclusion in your case reviews. I have previously provided a copy to you, and perhaps just to be of assistance to the Commissioner, can you tell me, Doctor, whether or not the cases indicated on this summary were determined by you to be in the various categories described on the summary.

THE COMMISSIONER: Had you given it to him before.

MS. CRONK: I had, sir.

THE COMMISSIONER: Oh, all right.

THE WITNESS: Yes, I was given these

last Thursday.

THE COMMISSIONER: Did you check them over; and assuming that Miss Cronk has not slipped in an entirely different piece of paper in the meantime, did you find them to be correct?

THE WITNESS: I did check them over and I did find them to be correct.

THE COMMISSIONER: Yes, all right, this will become 260.



MS. CRONK: Thank you, sir.

---EXHIBIT NO. 260:

Conclusions reached by Dr. John Fay re: Possible Involvement of Digoxin Intoxication.

MS. CRONK: Q. Doctor, may we turn then, if you will, for a moment to the nature of the information that was available to you, or made available to you at the time that you were asked to undertake this review, and then the actual methodology that you employed in doing so.

May I ask you first, Doctor, what information or data, and you alluded to this a few moments ago, was available to you for purposes of carrying out these case reviews.

A. After the initial meeting at police headquarters, and I can't remember exactly what went on there. There were a number of people including the Chief Coroner and lawyers from the Crown Attorney's office and the Chief Forensic Pathologist and some police officers, and I can't remember the details of that. After that I was introduced to the room in the Hospital for Sick Children where the charts were and I went freely to and from that room and made my notes as I surveyed the charts and it took me several days and several



visits to do this and complete it.

Q. I take it then, Doctor, that in the first instance obviously you had available to you the actual medical records of the children involved.

A. I had the Hospital chart, I did not have anything other than the Hospital chart, and I presumed that was the total clinical medical information on the patient, on the child.

Q. Did you, Doctor, for example, in those cases where an autopsy had been conducted on a particular child, have available to you either the preliminary or final autopsy reports with respect to the chart?

A. Oh, yes. In all cases where an autopsy had been done I had the anatomic diagnosis, I had listed the pre-mortem diagnosis, clinical diagnosis and I had the pathologists findings and in most of these cases I think I made a note of the anatomic diagnosis.

- Q. Doctor, did you have available to you as well any of the toxicology data concerning digoxin which had been prepared by the Centre for 'Forensic Sciences?
  - A. Well, it is difficult for me



to answer this, because I can't recall exactly where I picked all this forensic information up. I got some of it at meetings, I think at the police headquarters. Some of it was there in the same envelope that the chart was in and some of it I got from Mr. Cimbura at a meeting which was held at the Hospital for Sick Children with the Chief Coroner and Dr. Hastreiter and other people who were listed in the minutes of the meeting on September 13th.

So I am not sure exactly when I gleaned and got all the toxicology that I have recorded in my notes, I really can't tell you.

Q. Thank you, Doctor. Doctor, did you at any stage, to the best of your recollection, have made available to you in written form a formal report from the Centre for Forensic Sciences setting out various toxicology findings in any particular case, do you remember seeing a written report in that fashion?

A. I certainly don't remember seeing it, no. It was never sent to me, I can say that truthfully, and I never saw it.

Q. Thank you, Doctor. Doctor, as well this Commission has heard evidence from Dr. Harry Bain from the Hospital for Sick Children



concerning a report which her prepared in June, 1982 that was subsequently revised by him on two occasions, it was entitled "Report of The Assessment of 44 Deaths on Wards 4A/4B of the Hospital for Sick Children"; to the best of your recollection did you see that report at the time you were undertaking your review?

A. No, I don't recall seeing that report.

As heard evidence concerning certain packages of information that were maintained on the Cardiology Wards by the involved staff cardiologists, those packages have been described in these proceedings as Zebra packages containing specific information with respect to the involved child. Do you recall as best you can today having seen those packages with respect to the involved children?

A. No, I know what the Zebra is and I know the Zebra package is used. I did not see, I cannot remember seeing any Zebra packages. On the other hand if I had thought of it I am sure I could have asked to see them.

- Q. Fair enough, Doctor.
- A. So that is my fault.



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| Q. | To | the | best | of | your | recollection |
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A. No, I don't think I saw the Zebra packages.

Q. Doctor, as part of the materials which you were reviewing to undertake this case review, did you have reference to any of the transcripts of evidence from the Preliminary Hearing with respect to the charges brought against Nurse Susan Nelles, as best you can recall?

A. I can't recall seeing any transcripts of that nature. There were odd comments or references to it, but no I didn't see any transcripts.



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Q. Doctor, with respect to the actual case reviews which you did prepare, we see in each case as I referred to a few moments ago a type-written version of the case review, and in behind that in each case - there is no magic about it, Doctor, in where they are to be found in the brief --

A. Yes.

Q. -- that is just the way they were bound. There is a series of handwritten notes with respect to each child and I think you told me a few moments ago that those notes were prepared by you at the time you were going through the actual medical record of the involved child.

A. Yes.

Q. Do I have that right?

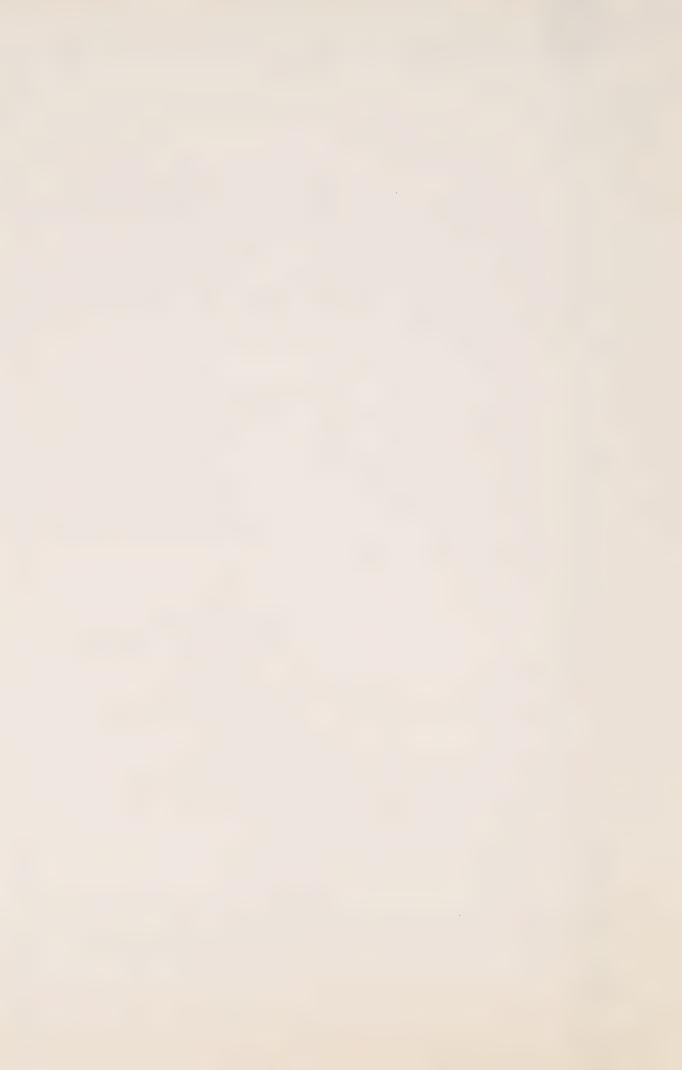
A. Yes. They were all prepared at the time. I had the actual record in front of me when I was making these notes. It was open before me.

Q. Doctor, again for purposes of illustration could I ask you to turn to page 2 in the case of Laura Woodcock and to the handwritten notes.

Do you have that, Doctor?

A. Yes, I have.

Q. All right. On page 2, Doctor, there are a number of items of information set out



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concerning the clinical history of the child, the date of birth and the date of death.

If we turn to the next page of the handwritten notes, numbered page 3, we will see the title "Police" and then a number of comments set out. In this case its exact cause, CR arrest uncertain infant stable prior to 3 a.m. or 300 hours day of death, et cetera.

Can you help me, Doctor, as to what the source of the information was when we see an indication referring to the police in your handwritten notes followed by certain items of information particular to the involved child?

In fairly substantial envelopes, thick envelopes, and after I had reviewed the chart and made my notes and come to my decision, there was another envelope, thin brown paper envelope as I remember, within that outer covering which had a report which was certainly as I understood it prepared by the police. I thought probably it was Dr. Hastreiter's input into this because Dr. Hastreiter had gone over all this ahead of me. I was doing it as I understood it for probably the second time, and that is where I got that.

Now again it is difficult at this



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interval of 15 months or whatever it is to remember in detail, but I am sure that that point can be clarified and confirmed. I think there is no question it can be because I only got it from that envelope.

I didn't ask for it specifically or especially. It wasn't handed to me as a separate report. It wasn't given to me as a separate thing. It was in that envelope, and I looked at it after I had reviewed the chart.

Q. Thank you, Doctor.

And, Doctor, as well in this particular case we see reference at the bottom of page 3 to some toxicology data with reference to skeletal muscle, exhumed skeletal muscle.

Do you have any present recollection as to what the source of the toxicology information was that is containing your handwritten notes where that information does appear?

A. No, I really can't remember that. It may well have been on that same note that we were just referring to. I don't know. It must have come originally from Mr. Cimbura's office. There was no other report as far as I am aware.

Q. Doctor, before reviewing the medical records of these 36 children, and before making





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your handwritten notes in each case, did you discuss the possible involvement of digoxin intoxication in their deaths with any physicians at The Hospital for Sick Children to the best of your recollection?

A. I have known Dr. Rowe for a long time, and I mentioned to him after I had agreed to do this that I was involved at the request of the chief coroner. I had no further discussion. I mentioned it to Dr. Freedom who made some fairly polite remark, and that was the end of it.

And if I may, Mr. Commissioner, I would ask a favour. I would like to make a short statement if I may.

THE COMMISSIONER: Certainly. Certainly.

THE WITNESS: I know Dr. Rowe and I know the cardiologists in his Division at The Hospital for Sick Children. Most of them I have known for a very long time. It has been my good fortune to have had their help and advice over the years with my paediatric patients, and I have the greatest respect for them and the highest regard for their professional expertise.

Thank you very much.

MS. CRONK: Q. Doctor, I well

appreciate the sentiments that you have just expressed.



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I take it that notwithstanding a very long relationship as you have just outlined with Dr. Rowe and several of the other cardiologists at The Hospital for Sick Children that you did not, prior to undertaking your specific review of these medical records, discuss the individual cases with any of them. Do I have that correctly?

A. Absolutely not. It was because of my extremely high regard and respect for them I wouldn't have thought of doing so.

Q. Thank you, Doctor.

Doctor, similarly for the purpose only of clarifying the various steps that may or may not have before you reviewed these medical records, did you before actually looking at the medical records for yourself discuss the possible involvement of digoxin intoxication in these cases with Dr. Hastreiter to the best of your recollection?

A. I really had very little discussion with Dr. Hastreiter. I never sat down alone with Dr. Hastreiter and went over anything.

The only discussion I had with

Dr. Hastreiter was at these meetings at the Police

Headquarters and at The Hospital for Sick Children.

I never met with him separately. I never went into



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committee - I think there was talk of a committee with a pharmacologist or clinical pharmacologist that Dr. Hastreiter was going to chair. I wasn't a member of that committee; I didn't meet with that committee so I had no meetings with Dr. Hastreiter. I may have said a word or two with him after a meeting. It certainly was a word or two. It didn't extend over more than two or three minutes. If I had any further conversation with him that was the extent of it. Otherwise I met only with him at these meetings which you have minutes on.

Thank you, Doctor.

Doctor, perhaps put in broad terms I can express the question this way: prior to undertaking your review of these medical records did you discuss the possible involvement of digoxin intoxication with anyone, be it a representative of the Metropolitan Toronto Police, be it a representative of the Crown Attorney's Office, be it Dr. Ross Bennett, be it Dr. Tepperman or anyone else?

No. Not at all. I was left -I was left completely on my own to look at these records, and I went at my own pace, and I wasn't towards the end Mr. Wiley was giving me a call to get on and get the final dictation, the typed part that



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you have before my notes on each case, and that is the extent of the discussion. There wasn't any discussion.

Q. Thank you, Doctor.

A. I think that is as truthful as I could possibly be.

Q. Thank you, Doctor.

Doctor, after you had in fact reviewed the medical records and made your handwritten notes concerning each case, I take it, however, that there were then meetings or discussions held when, amongst other matters, your opinion with respect to these cases was expressed? Do I have that correctly?

A. Yes, but I think there really was only one meeting to which one could apply that sort of description, and that was the meeting at The Hospital for Sick Children on September 13th. I couldn't remember the date but you have given me the minutes, and at that meeting I had by that time completed my survey of the charts, and Dr. Hastreiter certainly had, and we sat down with the Crown Attorney, Mr. Wiley; we sat down with Mr. Wiley; we sat down with some police officers. I think Sergeant Press was there and Sergeant Warr, and also with the Chief Coroner, with Mr. Tepperman ...



A. Yes.

Q. -- I am showing you a copy of what was my understanding of the minutes of the

Well, to help you, Doctor, so

meeting of September 13, 1982 held at The Hospital for Sick Children. Those in attendance are recited

in the preamble to the minutes.

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it is not a matter of guess work --

On the copy that I am going to provide to you, Doctor, you will see on occasion throughout the minutes a black line with certain words expurgated. I tell you quickly that those expurgations have been made by Commission staff because they relate to particular medical personnel who may or may not have been on duty at any particular time. Other than that no expurgations from the minutes have been made.

Can you look at these minutes, Doctor, and tell me whether or not they reflect the meeting held on September 13, 1982 as best you can recall it?

faulty memory is because had you asked me to say how many people were at the meeting I would have given you about half that number. It was such a small room I don't know how we all got in there. Yes, I can recognize several of the names; most of the names I would say.



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of September 13, 1982, held at The Hospital for Sick Children.

Q. You yourself as you told us were in attendance at the meeting?

A. Oh, I was there. Yes, I was there.

Q. Doctor, I had previous provided a copy of these minutes to you. You have had a chance to review them. Can you tell me whether to the best of your recollection they reflect remarks made at the meeting held on September 13?

A. Yes. Again I didn't see these until you gave them to me last week, so I have never - after that meeting I had no written document, no minutes were handed to me, and I never saw such minutes until I had them from you last week.

Q. Doctor, could I direct your attention for a moment if you will to the first paragraph of the minute below the recitation of those individuals who were present, and it reads:

"Staff Sergeant J. Press advised that Sergeant Tony Warr would serve as chairman. He also stated that the purpose of the meeting was to categorize the deaths of 46 children,





"and at the outset to agree on establishing categories for these deaths."

A. Yes.

Q. Stopping there for a moment,

Doctor, to the best of your recollection was that the

purpose of the meeting as expressed by Staff Sergeant

Press on September 13th?

A. I can't remember that Staff
Sergeant Press actually said that or what Sergeant
Warr actually said. It certainly was my impression
that the meeting was called to go over the charts,
to go over the opinions on these children and to
form a consensus as it were. That was my impression
of the purpose of the meeting.

Q. Reading on, Doctor, in the first paragraph it indicates:

"He advised that at a meeting on Friday, September 10, members of the Homicide investigative team and Mr. J. Wiley four categories were agreed upon as described below."

And then there is set out below:

"(A) Murder - cause of death has been established.



| "(B) Prob | able m | urder. |
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"(C) Suspicious deaths - cases where we cannot say that they are murder or probable murder, but they are not natural deaths."

And then the last category:

"(D) Natural deaths."

Doctor, prior to this meeting had those been categories which you had used or had in mind or had you used if any a different system of classification with respect to these cases?

was first encountered as far as I am concerned at this meeting. I had never - I had never been asked to categorize the deaths in this form. I suppose you could say, well, this is really what your exercise was about, but this was a categorization - in fact there was a little bit of confusion that morning because Dr. Hastreiter had another classification I remember, and it was a little difficult to always meld the two and know, you know, what Dr. Hastreiter's classification meant with regard to the police classification.

 $\hbox{I know I had that because if you look}$  at the Xeroxed copy of the little yellow card that I





had attached to my notes as I read the chart you will see that there are different sorts of classification I think coming through.

Q. Well, Doctor, to assist you we will be coming to the indexed card in a moment.

A. Yes.

Q. But for the purposes now of understanding the various classifications that were at work, if I can put it that way, I take it that the ones outlined by Staff Sergeant Press having been agreed upon by the Homicide investigative team and as described in the first page of the minutes, were not classifications that you had previously used as at the date of that meeting? Do I have that correctly?

A. Oh, no, I hadn't - I hadn't used these A, B, C classifications. I hadn't been requested to.

- Q. All right, thank you, Doctor.
- A. That was the first time.
- Q. Doctor, if we turn to page 2 of the minutes you told us a moment ago that Dr. Hastreiter had used a different form of classification with respect to these deaths.

Dealing with the second full paragraph on page 2 of the minutes we see an explanation reported





in the minutes of the meanings of the classifications that he had used for each case, and he describes his first category - when looked at from a medical standpoint to consider a massive digoxin overdose. The first category described is that entitled:

"Good - would correspond to the

Homicide team's categories of (A) and

(B) - good probability for massive

digoxin overdose. Children died

unexpectedly."

The next category was described as "Fair", and Dr. Hastreiter is recorded as saying that:

"... would correspond to Homicide team's 'suspicious' category - children in whom it is unlikely they were overdosed, but the possibility cannot be ruled out. Died under circumstances that someone could have poisoned them."

And then the final category:

"Small - children in whom it would be extremely unlikely that they could have been overdosed, which Hamicide team would call 'natural deaths'."



22nov83 F BMcra Doctor, I would ask you now to turn, if you would, to the top of page 3 of the Minutes. I'm sorry, that is perhaps a bit confusing. There are two different sets of numbers on the Minutes. Perhaps we should use the large ones in the right-hand corner. It is page 221. This is a discussion concerning Jordan Hines, and I will return to that in a moment but, in the first paragraph, Doctor, it records you as saying that you explained that you had used categories A, B and C, which would correspond with Dr. Hastreiter's categories of Good, that is A, fair, B and C.

Now, as cumbersome perhaps, Doctor, as these various classifications are, would I be correct in suggesting that in reading your comments as recorded in the Minutes, where you have indicated that a case falls into category A, you felt there was a good probability of a massive dose of digoxin having been administered?

A. Yes, I would agree with that but, you know, if you look at my written notes, and again I have only had a recent chance to go over these after a long interval, I don't think I have used As and Bs and Cs in the written notes. The only As and Bs and Cs are on those little yellow



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tickets. Now, those were inscribed with As or Bs or Suspicious or Probable on that September 12th meeting.

Ω. Well, perhaps, Doctor,
we could simply clarify that. You have referred
twice now to little yellow cars --

A. Yes.

 $\Omega$ . -- or index cards that you kept. Could you explain to the Commissioner what you did in that regard, what kind of document you are talking about.

A. Well, you know, I ended up with 49 sets of notes. It was getting rather bulky, so what I did was, I took the yellow cards from my office, which is just a little consultation notification that my secretary gives me, about that size, and I put the child's name on the card and I stapled it to the notes and then I arranged them in alphabetical order because I wanted to be able to get to something quickly. If somebody mentioned a child's name, I wanted to get my notes out quickly. It was the only way I could do it. So now I had the child's name on the little yellow card stapled to my notes and they were all in alphabetical order, and that is the way I went to this meeting.



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It was only there that I put on the categories that we had been alluding to that morning as far as I can remember.

Ω. All right. Doctor, I am showing to you a photocopy of a number of index cards of the kind that you have described with an index attached to them. Are these the index cards that you completed with respect to these 36 children?

## A. Exactly.

THE COMMISSIONER: Exhibit 262.

--- EXHIBIT NO. 262: Series of index cards with respect to 36 children.

MS. CRONK: Q. Doctor, as I understood your remarks a few moments ago, these index cards were prepared by you prior to the meeting of September 13th. Could you clarify for me again when you did the actual classification of A, B or C which appear on the index cards? Was that done at the time that you did your chart review or at the meeting of September 13th or at some other time?

A. I did not categorize them

A, B or C or any other way than you have seen on my

notes, my actual notes, until the meeting of

September 12th. That was when I put that classification in. That is as far as I can remember it anyway.



THE COMMISSIONER: I think the important thing, though, is; does it represent your classification or does it represent the consensus?

that I have to say it really represents the consensus because, really, I didn't see the point of the meeting unless we were all there to try and come to some agreement. Maybe I misunderstood it. Again, there was never any written instruction that this is a meeting which we will attend and so forth, but that is what I understood.

MS. CRONK: Q. All right. Doctor, you referred a few moments ago to the meeting of September 12th. Did you mean September 13th or were you referring to September 13th?

- A. Oh, 13th, yes, yes.
- $\Omega$ . Thank you. Doctor, may we turn then now to the individual cases and case reviews dealt with by you. I don't propose to deal with all of them in detail.

Might we turn first to those cases where, based on your case review conclusions, you appear to have felt there was a high suspicion of digoxin intoxication or that it was the probable cause of death.



I would refer you first to the case of Justin Cook, which is the very last one which appears in the bound volume of your case reviews. Your handwritten notes in this case, Doctor, start at page 102. Do you have that, Doctor?

A. Yes, I do, yes.

Q. Doctor, based on your review of the medical record of this child and the other data available to you, could you outline for us, if you would, the factors that you considered of significance in this case in assessing whether or not digoxin intoxication was involved in the death.

December of 1980, died in March of 1981, just over three months of age, had very complex congenital heart disease. I think that the overriding consideration here, and the baby had been suffering blue spells, the overriding consideration here was that the post mortem serum digoxin level was 100 nanograms per millilitre and because it was such a high level and the baby had had a slow heart rhythm before death, which is certainly one of the manifestations of digitalis poisioning, I thought that that fact, the fact that the baby had had the arryhthmia and the cardiac arrest with that very high,



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as I took it, very high level of digoxin really made it highly probable that this child had died of digitalis intoxication. That was my thinking in a nutshell in that case.

Q. Doctor, if we turn to your index cards. Perhaps you should have those as best you can beside you as we go through these.

A. Yes.

Ω. I note in this case, it is found on page 36, that you assigned an A plus to this case, and I take it from what you have told us that that was the designation which you felt to represent the consensus at the meeting held on September 13th?

A. That is correct, yes.

Q. And if we turn then, Doctor, to the Minutes of the September 13th meeting, at page 2 of the Minutes - do you have it, Doctor?

A. Yes, I have it.

Q. The third full paragraph on page 2 there, Doctor, in the middle of the paragraph, records the following:

"Sergeant Warr advised that the cases classifed t as Murder were:
Cook, Estrella, Miller and Pacsai."



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I tell you that, Doctor, I do not note on a review of the Minutes any subsequent discussion recorded at the meeting with respect to Justin Cook. Can you help me as to why that was the case or indeed whether or not there was a discussion with respect to that case at the meeting of September 13th as best you can recall it, having regard to the indication that is reported that Sergeant Warr made?

A. There is nothing here about Justin Cook in these Minutes.

O. No. Fairly, Doctor, my suggestion is this: The Minutes record that at the outset of the meeting an indication was made that there were four cases classified as Miller, including amongst the four --

MR. LAMEK: It is "murder".

MS. CRONK: I'm sorry, what did I

say?

MR. LAMEK: "Miller".

MS. CRONK: I'm sorry.

Q. --- classified as murder,

that of Justin Cook, Janice Estrella, Allana Miller and Kevin Pacsai, there does not appear in any of those cases to be any subsequent discussion in the meeting.



tion, yes.

My question to you is simply this: Was it the consensus as you understood it at the meeting of September 13th that there need not be any discussion of those particular cases as they were being regarded by the majority as cases of murder?

A. Yes, I think that has to be the explanation, that those were accepted before the meeting really got under way so to speak. That's all I can think. I can't remember anything further. If there was no discussion, then they were accepted. But we must have looked at them in some way because that 'A' on the yellow card was made at that meeting. It wasn't made at any other time.

Ω. All right. And you have told us, Doctor, as I understood it, that where you assign an A, or in this case an A plus, that was intended by you to indicate a case of Probable.

A. Death by digitalishintoxica-

Ω. Thank you. Doctor, you have indicated in your handwritten notes in the case of Justin Cook as well that the digoxin level, I am referring now, Doctor, to page 102.

A. Yes.

Q. That the digoxin level was



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well above the toxic level and the baby had bradycardia just before death. You have referred earlier
in your notes to the post mortem serum digoxin level
of greater than 100 nanograms per millilitre. Can
you help me, Doctor, as to what you regard as a
toxic digoxin level in the blood or serum of an
infant as opposed to an adult?

an adult is about 2.5 nanograms per millilitre.

Infants appear to be able to sustain and manage higher levels of serum digoxin without clinically evident toxicity. So that I would think that you might put it up to 3.5 nanograms per millilitre, something of that order, but certainly higher than we would expect, than we would take as a toxic range in an adult. I think if we got an adult with 3 nanograms per millilitre, we think definitely we are in the toxic range. I think with infants one has to perhaps put it a little higher but not all that very much higher.

 $\Omega$ . All right. Thank you, Doctor.

Doctor, prior to reviewing the medical records of these 36 children particular to deaths at The Hospital for Sick Children what was the highest ante mortem digoxin level in a living



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patient with which you were familiar?

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- A. 5 nanograms per millilitre.
- Q. And was that in an infant or an adult, Dr. Fay?
  - A. An old man.
- Ω. May I ask you, as best you can recall it, prior again to reviewing these 36 cases, what was the highest ante mortem digoxin level in an infant that you were familiar with, if you can recall it today?

A. I have, in my experience, not had serum digoxin levels in excess of 3.5. I have not reviewed and surveyed this. I would be concerned even in an infant if it were 3.5 or 4, but I don't think I have ever seen one in my practice that has been higher than that. If I have, I can't remember it.

Q. All right. Thank you, Doctor.

Doctor, reviewing as well the notations that you made in your handwritten notes concerning Justin Cook, I note that in addition to the reference of the post mortem digoxin level of greater than 100 nanograms you have made a note as well with respect to a specimen obtained ante mortem



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which revealed a digoxin concentration of 72 nanograms per millilitre and you have mentioned as well as post mortem blood specimen of 68 nanograms per millilitre.

I take it, and perhaps it is obvious as those remarks are included in your hand-written notes, that that digoxin data was as well available to you at the time that you were assessing and classifying this case?

A. Yes. I am sure that if it appears in my note that way, it must have been available to me. I should emphasize that I am not a toxicologist and I do not know the circumstances under which these levels were taken, but presenting them to me as a clinician, which is what was being done, I would have to say they are very high and with a baby dying with bradyarryhythmia and slow heart rhythm and so forth, looking at it in this context, I would have to put it probable, highly probable.

O. Doctor, I would ask you to turn, if you would, as well to your final type-written case review with respect to this child, the preceding page, please, 101. You have indicated, amongst other things, that:

"The baby had suffered 'blue'



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spells and put on propranolol."

You have indicated:

"The serum digoxin level was
well above the toxic range and the
baby had a bradycardia just before
death."

As part of your review of the medical record of this child, Doctor, I take it that you had regard to the terminal events that were in fact suffered by Justin Cook?

A. Yes.

Q. All Right. Did you attach any significance, Doctor, to the fact that he had become bradycardic just before death?

A. Well, as I say, this could have been a manifestation of digitalis toxicity and I was being very heavily influenced by the toxicologist report and the levels of digoxin.

Q. Well, Doctor, leaving aside perhaps for the moment the question of the ante mortem and post mortem serum digoxin levels which were reported on Justin Cook, was there anything in your view about Justin Cook's clinical course or the manner and circumstances of his death which suggested in your mind digoxin toxicity or the



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possible involvement of digoxin in his death?

A. No, I don't think there is anything other than what we have discussed.

THE COMMISSIONER: Well, that is

bradycardia?

THE WITNESS: Yes.

MS. CRONK:  $\Omega$ . Doctor, you have indicated I believe as well, in response to my question a few moments ago, that the bradycardia and the arrhythmias suffered by this child might, I think the words you used, be a manifestation of digoxin involvement. In your experience, Doctor, are there any clinical symptoms or indicators which in your view are diagnostically indicative of digoxin intoxication?



G: DM: yk

A. No, that is a problem.

THE COMMISSIONER: I think we have a semantic problem, you didn't say exclusively, did you mean to put exclusively in your question?

MS. CRONK: I am sorry I thought I did, I did mean exclusively, that is what I meant by diagnostically unfinished --

THE COMMISSIONER: You have got the answer as if you put exclusively in, but there are certain symptoms that are indicative of digoxin poisoning but they are not exclusive.

THR WITNESS: They are characteristic but not diagnostic, yes, yes I agree.

THE COMMISSIONER: Well then perhaps it is my fault, isn't that what diagnostic means, isn't that what diagnostic means exclusively?

THE WITNESS: I don't know what it means but it may mean that too, I used it medically anyway.

Q. Doctor, now that that is clear

I take it that in terms of an exclusive indication

of digoxin intoxication under clinical symptoms

of which youare aware that a clinician could point to,

to establish digoxin toxication definitively.



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A. No, it is very difficult, very difficult because these patients often have severe heart disease. This child had a severe congenital heart disease, and the arrhythmia, the arrhythmia could be simply on the basis of the child's heart disease as a terminal event, in its own right so to speak.

Again, I don't think that in the setting in which I was looking at this chart I had to take as very very weighty information that that level of digitalis in the samples that were examined; and I had to take the serum digoxin level as being really extremely suggestive, highly probable, and that is what I did.

Q. Doctor you have indicated to the Commissioner as well, as I understood it, that there are chemical symptoms which you felt to be characteristic of digoxin intoxication, did I understand that correctly?

A. Yes, there are a number of symptoms of digitalis intoxication on the heart, on the rhythm of the heart. Digitalis can have an excitant effect or a depressant effect. That is it can give rise to rapid heart rhythms, tachy arrhythmias as they are called; or it can give



rise to depressant effects with bradyarrhythmias, heart block and cardiac arrest, on that basis, so that it can do either. One has to be extremely suspicious when patients are on digitalis that they present with an altered rhythm, either a rapid rhythm, extra beating; or they present with slow heart rhythm, or show that their pacemaker is altered, the locus of their pacemaker and so forth, or they have complete block between the upper and lower chambers and beating at a very slow rate. One has to be suspicious that this may be digitalis intoxication that one is dealing with.

Of course now we can get assays of digitalis, so that if in such a situation one were to find high levels of four or five one would necessarily have to presume at that point that this was likely the cause of the arrythmia. There are other symptoms; there is nausea and vomiting and visual disturbances, all of which of course don't apply - none of which I should say apply to infants.

Q. I am sorry Doctor, I am now in some confusion. You have mentioned the arrythmias generally that may occur. You have mentioned, I think you said visual disturbances and vomiting,



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which of those do not in your experience apply to infants?

Well visual disturbances there is no way an infant can tell you about that. In fact, as far as adults are concerned it is a very uncommon finding and that may be the case because perhaps there was insufficient questioning on that point, but certainly that doesn't apply to infants. Vomiting is seen with digitalis intoxication but not very frequently I would say; loss of appetite, anorexia, yes, but vomiting not very frequently. Of course the problem with infants is that they vomit frequently, even normal babies vomit after feeds frequently, everybody knows that, so I think it is difficult to know where to place that. I must say in going through the charts one was inclined to take into account whether the baby had vomited or not in forming an opinion, but then when you go and analyze these children that have vomited and those that didn't vomit there doesn't seem to be any correlation between what we call the "highly probable" or "less likely" or "improbable" from natural causes.

Q. Doctor we have seen as well that in a number of these cases a number of these children



suffered from what was described in the medical records as seizure-like activity, or rigidity during the course of their terminal events. In your experience is seizure-like activity characteristic of digoxin intoxication in either adults or infants?

A. No, it isn't, but if a cardiac arrest were to occur from whatever cause, then it is possible to get a seizure on the basis of brain anoxia, lack of oxygen, so that that is a non-specific thing, seizuring, no it is not a sign of digitalis intoxication. In a given situation where brady arrythmia, heart block, cardiac arrest, seizuring might occur because of brain anoxia.

Q. I take it then, Doctor, that in a situation where digoxin intoxication had in fact occurred, one might under given circumstances see in the particular patient seizure-like activities?

A. It is possible, but again it is not a manifestation of digitalis intoxication. Digitalis does have effects on the nervous system. In fact vomiting is probably - with digoxin, which is the only digitalis preparation we are talking about, is probably a central effect on the medulla, on the vomiting centre.

Q. Doctor, in the case of Justin



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Cook you drew particular note in your case review to the episode of bradycardia just before his death. Is bradycardia per se, in your experience, characteristic of digoxin intoxication?

Again it is characteristic, I mean, yes, we see this, it is a depressant, it is a depressant effect if you like. It is seen the question I think is whether that type of reaction to overdosage with digitalis is more common than the rapid heart rythms, the tachy arrythmias. It is thought that perhaps tachy arrythmias are more common in children than brady arrythmias. But you know any arrythmia that is going to result in cardiac arrest eventually, either the ventricle, the main pumping chamber stands still or else they go into fibrillation, which is an inco-ordinated electrical unstable situation which if not corrected very quickly terminates in death.

0. And are you talking now about infants, Dr. Fay?

Yes, I think so. I think digitalis intoxication can lead to cardiac arrest either tachy arrythmia, going into fibrillation and that is arrest; or with bradyarrythmias



and standstill. I think either is possible.

Q. Doctor again in the typewritten version of your case review in this case, your concluding sentence for Justin Cook repeats what we saw earlier from the minutes of the September 13th meeting:

"This is one of the four children who were accepted as cases of murder."

"... accepted as cases of murder."

suggests, Doctor, I think I fairly suggest to you

that digoxin was administered deliberately. My

question to you is, during the course of your

review of this case, did you consider whether or

not a massive overdose of digoxin might have been

administered accidentally as opposed to deliberately

in this child, or was that a matter upon which you

focused?

A. I really was there to say,
was this child, could this child have died of
digitalis overdosage. You must remember that we
were sitting with police officers, and we sat down
with police officers and this word keeps coming in,
and I don't think they will mind my saying this
because it is perfectly true, it is not a word that
I was using in this context. My job was to say -



I have used it here because you pick up these things, and I was in Homicide quarters when I was dictating it. When I was dictating it. What I was there to say was is it "highly probable", "probable" or "unlikely" or "natural causes". So I am just saying that I would really, if it is permitted, prefer to ignore that last sentence.

a judgment in this matter and I am not allowed to use the word either, so you and I may not use it and anybody else ---

THE WITNESS: I am very sorry but it does creep in. I know Sergeant Press will understand that these things - one sort of begins to use it, but I didn't mean that, and I don't mean it, and I don't wish it to be read.

THE COMMISSIONER: It is a judicial problem because Judge Vanek did make a finding and he was perhaps entitled to do it that it was one of the murder cases, but for our purposes I agree with you we won't use that word at all.

THE WITNESS: Thank you very much.

Q. The other aspect of the matter, Doctor, apart from the word itself, is whether or not



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in the course of your review of this case you lent your mind to the possible mode of administration, be it accidental, or deliberate, of digoxin, bearing in mind your conclusion that it was probable that an overdose of digoxin was administered to this child, was that a matter which you addressed?

Yes, it was. I mean to get again I am dependent on the toxicologists informing, in educating me if you like as to - and certainly my education in digoxin has been improved in the last year, as to whether that high level might have been due to say leaching out of tissues post mortem and so forth. But, yes, looking at it simply from the mode of death and the level of digoxin that was reported post mortem, I certainly suspected that if that were true, and I was taking it that it was an accurate finding, that it might well have been given intraveneously to achieve such large doses. That certainly crossed my mind, but you know that is very - I am sorry to be so vague about that, but certainly it crossed my mind that it might well have been given intraveneously.

Q. Doctor, since the date of preparing your case review and formulating your



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opinion with respect to this child, has any factor or circumstance come to your attention which has led you to revise or alter in any way the opinion that you previously expressed with respect to Justin Cook?

A. No that would be impossible, because once I had dictated or written that final note at the offices of the - at the Police Offices, I did not again go back to any chart; I did not discuss anything with anybody. I discussed the cases then, not at all, with anybody, that was the end of it and that is over a year ago. Since then I have not looked at anything and I have not considered anything, I haven't even looked at my own notes until last Thursday.

MS. CRONK: Thank you, sir. Mr. Commissioner might we take our break now?

THE COMMISSIONER: Yes, we will take

--- Short Recess.

20 minutes.





H/EMT/ak

---Upon resuming.

THE COMMSSIONER: Yes, Miss 'Cronk.

MS. CRONK: Yes, sir.

Q. Doctor, I understand that over the break you considered some of our discussion this morning and there is a matter that you would like to bring to our attention.

A. Yes. I am very sorry. I am in error when I say that I went towards the end of last year to the police officers' offices in Toronto, Homicide Section, to dictate or write out as I thought longhand my summary which is now typed and presented here with my notes.

I have had it drawn to my attention in fact I have been handed a letter which I wrote
to Mr. Jerome Wiley in January of this year because
he had been on to me to get my report completed, and
I dictated my report and I sent them to him with
this covering letter, or along with this letter, and
then they were typed, and then I came to Toronto and
corrected the typed account and it was finalized
after that.

That is why I thought I had written it up. I did not. I dictated it and sent the tapes on. I'm sorry.



Fay, dr.ex. (Cronk)

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Exhibit 263.

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|         |         | Ω.    | You   | are | referring | to | a | letter |
|---------|---------|-------|-------|-----|-----------|----|---|--------|
| dated J | January | 26th, | 1983? |     |           |    |   |        |

A. Yes.

Q. From yourself to Mr. Wiley?

A. That is right.

Q. And attached to that letter is a document entitled "Supplementary Report by the Metropolitan Toronto Police" dated February 8th, 1983.

A. Yes.

Q. Which records that you attended at the Homicide's Offices going over the transcripts of your recorded report on the deaths at the Hospital for Sick Children?

A. Yes, I'm sorry.

THE COMMISSIONER: Pretty soon the whole of that police report admission will be academic.

MS. CRONK: It is not the same thing,

THE COMMISSIONER: No. All right.

---EXHIBIT NO. 263: Letter dated January 26th, 1983 from Dr. John Fay to Mr. Jerome Wiley with attached report.

MS. CRONK: Q. Thank you, Doctor.



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We are grateful for the clarification.

Doctor, may we turn now to the case of Allana Miller? I refer you to page 99 of your case reviews, the second from last case bound in the book.

Your handwritten notes with respect to this child commence at page 99 and once again, Doctor, I would ask you to outline for us if you would, please, those factors that you consider to be of significance in assessing this case for possible digoxin intoxication involvement.

A. This child had congenital heart disease and digoxin was ordered at the Hospital and a maintenance digoxin dose was ordered which seemed to me in the reasonable range, but there was an order on the 19th of March and again on the 21st to hold digoxin, so it was clear that there was concern lest too much digoxin were to be given.

Then on the 21st of March, 1981 the child suffered a cardiac arrest. Now I don't know how that arrest came about, what the preceding rhythm was or I have got no information about that here, and I presume that there wasn't anything that I could see in the chart that indicated whether there was a tachy arrhythmia, brady arrhythmia or



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whatever it was. But anyhow the child suffered a cardiac arrest, and then again the digoxin post mortem serum was 78 nanograms per millilitre. Although there were multiple congenital anomalies and there was evidence of very important serious congenital heart disease, it seemed to me that this Was probably a death related to digitalis toxicity.

Q. And, Doctor, if we look at page 100 of your handwritten notes, the concluding statement that you have made referring to the digoxin level of 78 nanograms. --

A. Oh, yes.

-- was that that level of digoxin was well above the toxic range and could account for the sudden episode of bradycardia and cardiac arrest?

Α. Yes, that is right, but I don't know exactly what rhythms preceded that or for how long, but I thought that with that level certainly there was a probability that digitalis toxicity had been responsible.

Q. Doctor, would it be fair of us to conclude that once again your conclusion in this case up to the probable involvement of digoxin intoxication was based primarily if not solely on



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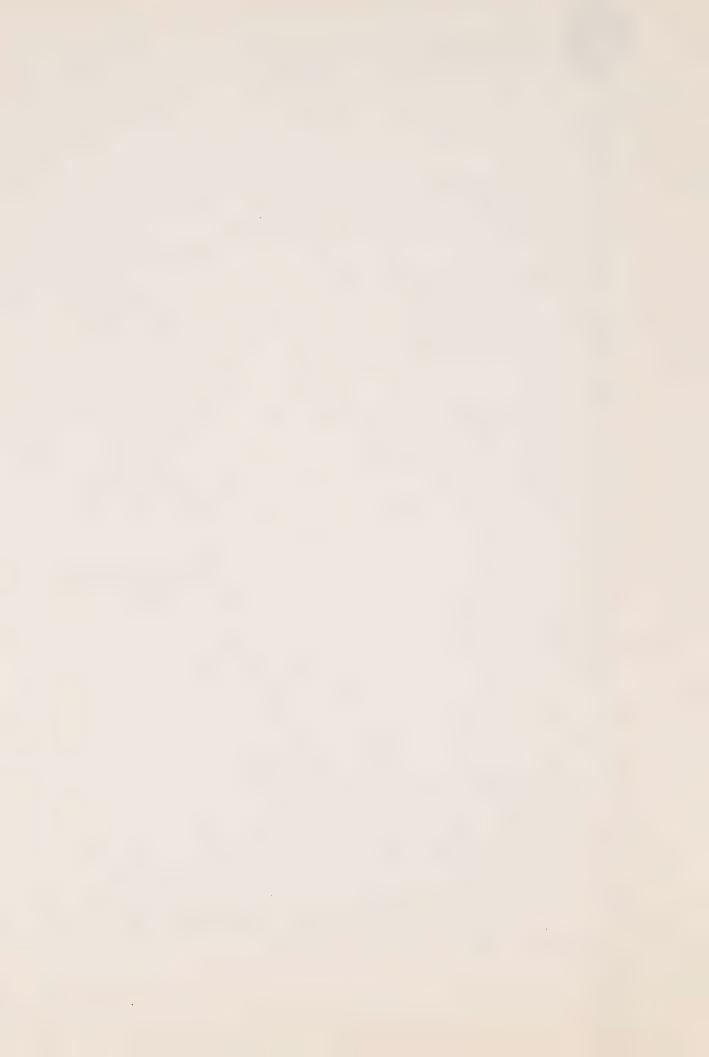
the post mortem digoxin level of 78 nanograms to which you have drawn our attention?

A. There is no question that with the information I had it was the post mortem digoxin level which made me put this death into the highly probable or probable digoxin toxicity category.

Q. Doctor, I would ask you to turn if you would to your typewritten version of your case review, and to the conclusion that you have expressed in the last paragraph which reads:

"Post mortem digoxin levels were 78
nanograms per millilitre - this level
of digoxin is very high and could have
accounted for the final episode of
bradycardia and cardiac arrest which
occurred March 21, 1981. There is
therefore a high suspicion of
digitalis toxicity in this case."

Doctor, on the basis of the language employed in the last paragraph of your case review did you have any doubt at the time that you were preparing your case review as to whether or not in fact digoxin intoxication had accounted or could account for the final agonal events and death of this child?



THE COMMISSIONER: There is an awful lot of difference between the last two alternatives you have put in your question.

MS. CRONK: I'm sorry, sir.

THE COMMISSIONER: Did or could?

Which do you mean?

MS. CRONK: I'm sorry, let me put it to you in two different ways.

Q. Did you at the time of preparing your final case review, Doctor, have any doubt or entertain any doubt as to whether or not digoxin intoxication caused this child's death?

A. I don't wish to irritate the Commissioner by sounding wishy-washy. I think that if you are going to say is there an element of doubt, in my profession there is so frequently an element of doubt that I would really be - I would really be doing the profession of medicine down if I didn't admit that.

I was asked to give my best opinion if that is an acceptable - that is what I understood so this is why I think I am perhaps giving rise to some difficulty for you with these various terms.

I think that this has to be in my highest category. There is a high probability, a



high possibility, a probability that this child died as a result of digitalis intoxication, and I am sorry I can't put it more explicitly but that is really the best I can do.

- Q. Doctor, please understand my question was not intended to be pejorative in any way.
  - A. No.
- Q. It was merely to clarify what you in fact did mean when you were preparing your final case review and you have helped us in that regard.
- A. Well, it is not the questioning, it is that I don't wish to put I wish to be as helpful as I possibly can and as clear as I can, but there are points where it really is impossible to be dogmatic.
  - Q. Thank you, Doctor.

Doctor, the progress notes in the medical record of this child, and I should tell you that the medical records are available to you here if you should at any time in our discussion wish to see them, but the progress notes in respect of this child indicate that difficulties were encountered at approximately 1:45 a.m. on the morning of her death; that at 2:40 a.m. 6 micrograms of Lasix were



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administered by IV push; five minutes later the child experienced seizure-like activity and a Code 25 was called. No heart rate was detected. CPR was therefore

initiated. The child was subsequently pronounced dead at 3:27 a.m.

That is found, Mr. Commissioner, at page 42 of the medical record, Exhibit 115.

Having regard to the course of events from 2:40 a.m. in the morning on, Doctor, in the case of Allana Miller, do you attach any significance to the course of those events and their progress through to the time when the child was pronounced dead?

A. No. The injection, the bolus of furosemide Lasix was given at 2:14 - is that correct?

- O. At 2:40.
- A. And the child died at 3:20?
- Q. The child was pronounced dead at 3:27 a.m.

A. Well, of course I suppose one has to entertain the possibility that this was perhaps not furosemide that was given but something else. That is one possibility. That has been known to occur before.



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The other possibility is that the digitalis toxicity which I think probably existed was aggravated by the intravenous furosemide by causing electrolytes disturbance. I think that is a possibility too.

So I don't know how much effect or what effect if any that administration of Lasix had, but there are two possibilities again.

Q. Doctor, based on your recollection of your review of the medical record of this child was there anything which in your opinion in a clinical sense would assist in establishing whether or not this child in fact received lasix at 2:40 in the morning?

Would you like to have this chart before you, Doctor, or are you sufficiently familiar with the events?

A. It is more than a year since I saw the chart so I couldn't claim to be that familiar. I don't think think there was anything else.

The clinical notes indicated a perfectly reasonable dosage of digoxin given to this child. I have the doses here, and I don't recall anything in the clinical notes indicating other than therapeutic doses of digoxin. If that were furosemide which is



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stated in the chart, if it contributed to the demise of the child, then it may have been that it caused some electrolyte disturbance in a child who was very severely digitalis toxic.

If that were the case it probably didn't alter the final outcome. If it wasn't furosemide, it was something else, then I don't know Who can say? I suppose it is possible that it was something else, but I think we have to take it that in fact furosemide or Lasix was given and if it was contributory then it could only be contributory by either upsetting the electrolyte balance or possibly altering the volume status of the child, but the child was presumably already sick from digitalis intoxication, and I have to hold to that because that is what I am going on on the toxicology report.

Doctor, once again in light of your answer earlier this morning with respect to Justin Cook - perhaps there is no need to put the question to you again but since the date of preparing your case review on Allana Miller have any facts or circumstances come to your attention which would lead you to alter or revise your conclusion with respect to the death of this child in any way?

I have done no further perusal



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of my notes of the charts. I have had no further discussions with anybody concerned, and I mean anybody at all, and therefore there is no basis, no rational basis on which I could possibly alter my opinion here today.

THE COMMISSIONER: Can we take that for all of these?

THE WITNESS: Yes.

THE COMMISSIONER: We don't need to ask that question again.

MS. CRONK: Q. Thank you, Doctor.

Could I ask you then to turn to the case of Kristin Inwood if you will? Your handwritten notes with respect to this child begin on page 93.

Do you have that, Doctor?

A. Yes, I do.

Q. Once again I would ask you to turn if you would, please, to the factors which you consider to be of significance in the case of this child when you were assessing the possible involvement of digoxin intoxication in her death.

A. Well, again this child has severe congenital heart disease.

On the day of this child's death the electrocardiogram is being monitored and there were



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abnormalities noted, abnormalities of rhythm presumably.

I don't know. I have not made a note of that.

The digoxin is ordered two days before her death, was a reasonable range, and the digoxin level on the day before she died was 2.6 nanograms per millilitre which is in the really - within the therapeutic range for this child.

The autopsy did show some changes in the heart muscle which could have led to an arrhythmic death, and that child had aspirated so that that probably was very much a contributory cause.

I did not feel, however, that one could completely rule out digitalis toxicity.

Now after that I had some toxicology reports and I am not sure when I got those from Mr. Cimbura. That is the only source I could have got them from, and there is a discrepancy here between my original assessment which I put as possible and not very likely --





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Q. I'm sorry, Doctor, could I stop you there for a moment?

> Yes, sure. A.

Are you referring now to the notation made on the top right-hand corner of page 93?

I am, yes.

And when you say that was your original notation ---

Yes, that must have been made A. at the time I reviewed the chart.

All right. That then was your original classification with respect to this death?

Yes, that was my original A. classification.

I note, Doctor, on the bottom of page 93 once again there is a reference to the police with some items recorded on the page concerning the condition of the child and the possible contribution of digoxin toxicity. I take it from your evidence earlier this morning that it is your belief that that information would have been obtained by you from the summary of Dr. Hastreiter's views that was contained in the brown packet filed with the medical record that you have reviewed at the Hospital?

That is correct, and it would





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very likely have been obtained at exactly the same time, immediately after I think I reviewed the chart. I think so. But then I'm not sure when I received the report on the toxicology and my only explanation for the change in my opinion which clearly took place at the March 13th meeting was that I had a serum digoxin level, and I don't know when that serum was obtained, of 491 nanograms per millilitre and figures for fixed specimens of the heart muscle which were 127 and 337 nanograms per gram. So, I think it was because of the toxicology report that the meeting of March 13th I changed my opinion because I certainly did change my opinion.

Well, Doctor, perhaps we can deal with that in stages. Referring first to the handwritten notes which you made concerning the toxicology data, you have recorded, as you have pointed out, a serum level. There is a question mark of 491 nanograms per millilitre and then there is an indication that that was unbelievably high and I take it that that was in your view a quite extraordinary level?

Well, it sounds an extraordinary Α. level but of course you have to take into account a good many factors which I am not necessarily acquainted



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with as not being a toxicologist. I don't know whether Mr. Cimbura said it was unbelievably high or whether that was simply my impression, perhaps not based on very hard scientific data but it sounded high to me and I think that is why I wrote it.

Doctor, could I ask you if you 0. would, please, to turn to the minutes of the September 13th meeting at page 222?

> Yes. A.

We see there at the bottom of the page, Doctor, a discussion with respect to Kristin Inwood's set out and in the second paragraph the following comment is attributed to you:

> "Dr. Fay advised that following his review of charts, he put this death in a low suspicious category. He could not rule out the possibility, but did not think it was very likely."

That I take it, Doctor, was a view expressed consistent with your original classification of this death as having a possible but not very likely involvement of digoxin intoxication?

That's right.

All right. And then subsequently, Doctor, if we turn to page 223 of the minutes we see





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that a vote appears to have been taken in attempting to reach a consensus with respect to this child and on that vote you have indicated that you felt the case to be one of low suspicion and the following comment is attributed to you:

"Comment: Would rule out the possibility of overdose; it would be difficult to be absolutely convincing from the toxicology analysis."

Do you see that, Doctor?

A. Yes.

Q. And then if we turn to the next page, Doctor, page 224, we see a further discussion and a second vote taken in respect of this child and in this case your vote is recorded as being "Probable murder", and this comment is attributed to you:

"Comment: I can go along with Probable; 6 ml. is a big dose for a baby."

Doctor, having the benefit of having the minutes in front of you, can you assist us as to the basis upon which you altered your opinion by placing this child's death in the highest category of digoxin involvement suspicion as opposed to the lowest category which reflected your original vote on the matter?



A. Well, my first comment on page 223 of the minutes is in complete agreement with my note or my clinical notes, or whatever you like to call them, that I made from the chart. That is exactly the same. There must have followed some discussion and I clearly changed my mind, I would think within the next few minutes, as a result of that discussion, and I can't recall the details of the discussion. Undoubtedly the toxicology came into this and I'm not sure where this 6 millilitres comes in either.

Q. Doctor, I would ask to help you with this, if you would turn again to page 222 if you would, at the beginning of the discussion with Kristin Inwood.

A. Yes.

Q. And it is there where you and Dr. Hastreiter are recorded as having made your initial comments. Mr. Cimbura is then recorded as having outlined the result of the various toxicology tests and amongst those listed by him are the findings on the myocardium test, the finding on the exhumed specimen of skeletal muscle and then as well reference is made to the specimen of blood obtained on March 12th, which gave a negative value for digoxin and,



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finally:

"A specimen reported to be serum turned up quite a long time after the initial investigation. Fluid when analyzed showed - 491 mg."

And then there is a further discussion by Mr. Cimbura and it is after that discussion, I suggest to you, Dr. Fay, that the first vote with respect to this case was taken and at that time, having had the toxicology data put before those present at the meeting, including yourself, you categorized this death as one of being "low suspicion"?

Yes, I did, I was holding to my original opinion.

THE COMMISSIONER: 6 millilitres is found on page 6 and it is a comment by Dr. Gilmour-Bryson. I am trying to find out myself what it refers to.

MS. CRONK: I'm sorry, the comment with respect to the 6 millilitres, Mr. Commissioner, you are quite right, is set out at page ---

THE COMMISSIONER: Yes, Dr. Fay is concerned about that.

MS. CRONK: It is set out at page 224. There had been an indication earlier in the minutes,





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as I recall it, that there was some question as to whether or not the child had been on I.V. Dr. Bennett is then quoted as stating that the child was given intravenous on March 13, listed at the same time as the onset of critical symptoms and Dr. Gilmour-Bryson is recorded as advising that it was 6 millilitres.

THE COMMISSIONER: That has nothing to do with toxicity though, I take it you are merely making a comment, are you, at the bottom, Dr. Fay, that it is a large dose?

THE WITNESS: Yes, it is a fantastically large dosage even of the paediatric digoxin solution.

THE COMMISSIONER: Well, was it digoxin at all?

THE WITNESS: Well, that is what I really don't know.

THE COMMISSIONER: I don't understand from the comment here whether it was given intravenous. Was it digoxin that was supposed to have been given? I'm looking at the comment about Dr. Bennett.

MS. CRONK: I think, Mr. Commissioner, to resolve the matter it would be helpful if we had Kristin Inwood's medical record, it is Exhibit 113.

THE COMMISSIONER: It would help, do we know who wrote these minutes, has anybody told us





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who is the author?

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MR. YOUNG: Mr. Commissioner, perhaps I could help in that respect.

THE COMMISSIONER: Yes.

MR. YOUNG: My understanding is that it represented the Metropolitan Toronto Police and I am not sure what her title is or what her exact capacity was but she was a stenographer and she was asked to sit in on the meeting and she took down the notes and I should tell you that she did not have any experience with respect to this particular investigation. She wasn't familiar with all of the terms. She did the best she could. She made notes of the meeting. It was an extremely long meeting and these are the notes.

THE COMMISSIONER: Well, there would be nothing in the chart though, Miss Cronk.

MS. CRONK: Well, you will recall, Mr. Commissioner, that in the case of Kristin Inwood, in the morning when abnormalities started to be apparent on the monitor strip a resident was called and the progress notes, sir, at page 63 indicate that Lasix 3 milligrams were given I.V. by the resident. There is then a description of tachycardia 200 beats, baby became irritable and at 2:30 in the morning a



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Code 25 was called.

The notation in the minutes attributed to Dr. Bennett suggests that the child was given intravenous on March 13th, that is the morning of her death, at the same time as the onset of critical symptoms.

Perhaps Dr. Fay can help us.

Doctor, do you have any recollection today as to what dose was being referred to by Dr. Bennett or Dr. Gilmour-Bryson?

A. No, I don't, I can't remember.

MR. ROLAND: It may be that Dr. Gilmour-Bryson was there at the time. It appears there was no other reason for Dr. Gilmour-Bryson to have apparently said there was 6 millilitres given.

MS. CRONK: Where, at the meeting? MR. ROLAND: At the Hospital at the time. There doesn't seem to have been any reason for Dr. Gilmour-Bryson to have said that.

MS. CRONK: Q. Well, Doctor, bearing in mind the obvious concern that you have expressed with respect to the dose and Dr. Bennett's comment concerning the administration by I.V. of medication of the child at the same time as the onset of critical symptoms, I draw your attention again to what I take



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to be the disclosure early on in the discussion of Kristin Inwood by Mr. Cimbura of the toxicology results, including the level of 491 nanograms found in a serum specimen from the child that was followed I suggest by a vote, at which time you categorized the death as being one of low suspicion?

> A. Yes.

And subsequently then changed your vote to one of probable murder.

As best you can, Doctor, can you tell us please the basis upon which you were motivated to change your opinion with respect to this case?

It could only have been from further discussion after Mr. Cimbura had presented his data and, as I say, the purpose of the meeting as I understood it was to try to come to some consensus and clearly for reasons that I can't remember I changed my mind and I cannot recall the details of that discussion.

All right.

But it was a change of mind, change of opinion from my original interpretation.

Doctor, I would refer you to page 224 of the minutes.

> A. Yes.



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Q. The only recorded discussion which appears to have taken place after the first vote concerning this case is set out commencing at the top of page 6 and I draw your attention to the following remarks:

"Staff Sergeant Press expressed the need to present a united front. Mr. Wiley stated that at Friday's meeting, the investigative team had been relying on toxicology levels. Dr. Hastreiter observed that one could argue that this was a contaminated sample. J. Wiley asked, when you combine this with the myocardium level, does not this become less likely? Dr. Hastreiter replied yes, combined with skeletal muscle. Mr. Wiley advised that this decision should not be looked at from the point of view of proving cause of death and going to court; this is to come to some conclusion to discuss with parents. Dr. Hastreiter stated that from a purely medical standpoint, the myocardium level is high, skeletal





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"muscle is high, serum is extremely high - almost unbelievable which makes it suspicious. This is why he had originally placed this child under the 'Probable' category." And he then continues:

"From a clinical viewpoint, Dr. Hastreiter said this death would be in the 'Suspicious' category at the most." Doctor, does that part of the recorded

discussion assist you in any way in recalling the basis upon which you were motivated to change your opinion with respect to this case?

Not really because everybody seems to have changed opinions and I don't remember what exactly the points were that made that occur.

Doctor, what did you understand Sergeant Press to mean when he is recorded as having indicated the need to present a united front?

Oh, I really didn't understand A. anything particularly from that. I mean, it may have been that Sergeant Press was referring to the Homicide Squad, I don't know. I am not part of that and never was, so, I don't know what he was meaning by united front particularly. I must agree and I must





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say again that it was my understanding that that
meeting was to reach a consensus; that I do agree
with. Clearly I could see no other reason for
opinions being asked and taken around the table if it
were not to have a general discussion. In fact, it
was the only time at which we sat down and discussed
each case and I have been reminded again that the
meeting in fact lasted through the forenoon and way
into the late afternoon, that is longer than I had
recalled.

So, we had discussed every patient here in some detail. But the united front, I don't know, I can't tell you what Sergeant Press meant by that.

Certainly I understood that the chief coroner was wanting a consensus and as a matter of fact at that point I was anxious to complete this report and complete my part in it. So, I was quite ready to go to a meeting and try to come to a consensus because up until then I had been entirely on my own and working in isolation, virtually, for practical purposes.



Perhaps, Doctor, the question

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that arises from that is, what did you understand the purpose to be in attempting to reach a consensus; why was a consensus being sought? I can only assume that the

purpose of the consensus was that the Chief Coroner's Office could know from that meeting, could gather a general opinion of the group that had been working on this.

Doctor, you will recall that in this portion of the minutes as well Dr. Hastreiter is recorded as having said that from a clinical viewpoint this death would be in the suspicious category at the most, was that a view that you shared from a fairly clinical perspective, Dr. Fay?

It certainly was, because I wrote it down initially and I changed my mind when Dr. Hastreiter changed his mind.

Was it then Doctor purely on the basis of the toxicology data, and in particular the levels in the fixed miocardium specimens and the blood serum level of 491 nanograms that led you to place some other degree of significance on this case?

There is nothing else which Α. would - looking at this now and reviewing it there is nothing else which could possibly cause me



to alter my opinion, other than the toxicology, other than what I assumed I gathered were very high levels, that can be the only explanation as far as I am concerned.

Q. Doctor I would ask you to turn again if you would to page 94 of your handwritten notes, and on the left-hand side of the page Doctor, towards the middle of the page, is the following notation:

"Mr. Cimbura ..."

and an arrow to the serum specimen with the comment:

"Where obtained-autopsy specimen from
sagittal sinus."

Doctor, do you have any recollection as to the basis for your belief that this sample was obtained at autopsy from the sagittal sinus?

A. I can only interpret it at this time as Mr. Cimbura saying that he believed it was obtained from the sagittal sinus post mortem.

Q. Were you, in the course of your review of this case, Doctor, provided with any particulars as to the manner and circumstances in which that blood serum sample would have been taken?

A. Oh, I was given, I was given



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no, nothing written out, nothing in print of the toxicology, I can't remember anything being given to me in that regard. This - I had information about this at the meetings that I referred to previously from remarks made by Mr. Cimbura; from conversations across the table, but I never had anything in terms of figures other than I got from the police record, I think there was something there that I referred to in that envelope that I mentioned, or from the meeting when we sat down with Mr. Cimbura. I never had anything given to me as a report on the toxicology. I never went in to review the chart with the toxicology report in my hand. I never went back to go over my notes with the toxicology report available to me. In fact I didn't see that until you showed it to me.

Doctor, I take it then that 0. you have no personal knowledge with which you can assist us as to the source and the manner of the taking of that serum sample in Kristin Inwood?

No, I haven't, I haven't at Α. all.

Thank you, Doctor. Doctor, 0. I draw your attention as well to the last comment made in your handwritten notes which reads:



| "Child  | give | en | 'Lasix' | just   | prior | to |
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| develop | ping | cr | itical  | sympto | oms." |    |

Can you help me, Doctor, as to what that note was intended to signify?

A. Well if I put something in parenthesis like that it means that I am wondering, in this context I am wondering if that really was Lasix or whether it was some other drug.

Q. Doctor, to help you in that regard progress notes for this child indicate, this is at page 63 of the medical record, Mr. Commissioner, Exhibit 113; indicate that at 2:00 a.m.:

"Monitor strip showed abnormalities."

I am sorry, Doctor, page 63.

THE COMMISSIONER: It was before that I think, wasn't it:

"Lasix given at 2310 ..."

Q. You are right, starting at the beginning of the note Doctor, at 2:00 a.m:

"Babe was feeding poorly all night."
Do you have that Doctor?

A. Yes.

Q. "Fed by ..." I believe that to be, is that a "D tube"?

A. Yes.



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That is in the evening:

"Post Lasix voided ..."

And I am having difficulty with that.

A. "... once 34 cc".

Q. 34 cc's urine, and then a note ain, 2:00 a.m:

"Monitored strip showed abnormalities.

Team leader notified. Resident called.

Lasix 3 ..."

I take that to be milligrams?

A. Yes, 3 milligrams.

Q. "... 3 milligrams given IV

by resident. Tachycardia 200 beats. Babe irritable ... "
And then several plus signs:

"At 2:30 Code 25 called and babe was not able to be revived. Parents notified."

That appears to be a note by one of the members of the nursing staff on duty.

Doctor, having the benefit of the progress notes in front of you, can you indicate for us whether or not there was anything of particular



significance in the progress notes which led you to question, in your review of this case, whether or not Lasix in fact had been administered to this child?

which I was looking at those charts, when I see that furosemide given at 2310 the night before, and then another 3 milligrams given at 2 o'clock the next morning, and then very shortly after that the baby develops a rapid heart rhythm of 200 beats a minute, becomes irritable and then arrests half an hour later, then I have to think whether the Lasix, if it were Lasix, played a part in the total event, the total arrythmia and precipitating it possibly, or whether in fact furosemide or Lasix which is the trade name was indeed the drug that was given to the child, that's all.

Q. Doctor, you will recall a few moments ago when we discussed the case of Allana Miller?

A. Yes.

Q. And I drew to your attention that progress notes in that case indicated that at approximately 2:40 in the morning Lasix was



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administered to the child, at least that is the drug recorded in the progress notes, and five minutes later the child's terminal symptoms are introduced and subsequently the child in fact dies of cardiac arrest and was not able to be resuscitated.

I am curious, Doctor, can you help me as to what is contained in the notes of the final course of Kristin Inwood which would cause you to suspect that Lasix may not have been given to the child, given that you have told us that that concern did not immediately present itself in the case of Allana Miller?

A. I don't know that it immediately presented itself here in this case. The fact of the matter is I can't tell you the time interval because I made several journeys to Toronto, between my review of the one case and the other. I can assure you that I am really only dealing with a chart. Therefore, if I express one emphasis one day on a certain clinical situation and another on another day, it really is not very much out of keeping with the practice of medicine.

I don't think that may be all that there is to it. If it sounds inconsistent I am sorry, but I can only put it that way. I have to

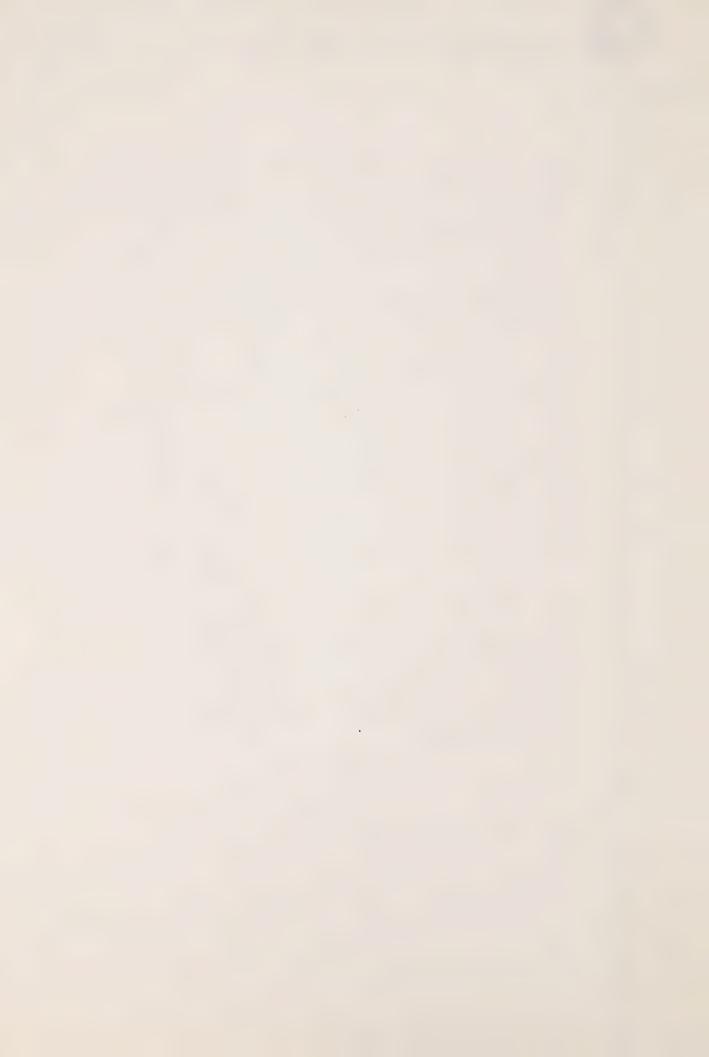


look at it from the point of view, did this child die with an overdose of digitalis, and therefore I have to wonder whether furosemide was indeed given and aggravated digitalis toxicity, or whether furosemide was given and had no deleterious effect, or whether in fact there may have been another drug given mistakenly for furosemide. I really can't be more explicit than that, these were not done one after the other. So although it may seem inconsistent, I would assure you that I might do the same tomorrow if the reviews of the chart were separated by say a period of two or three weeks, which they may have been, I don't know.

Q. And I take it Doctor then, that you have told us there are at least three possibilities in the case of Kristin Inwood: the first is that Lasix may have been administered and have no adverse effect on the child, that is one possibility?

A. Yes.

Q. The second possibility you have identified is that Lasix may have been administered and had an adverse effect on the child and contributed, I believe you said to the electrolyte imbalance of the electrical difficulties being experienced by the child, that is the second



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A. Yes, and given quite correctly, it could still happen.

- Q. Administered properly?
- A. Administered properly.
- Q. And the third possibility is the Lasix in fact was not administered to the child although it is recorded that it was?
  - A. Yes, it's possible.

THE COMMISSIONER: Something else was administered instead?

THE WITNESS: Yes.

Q. Doctor, I take it as I similarly put the question in the case of Allana Miller, is there anything in the clinical course of this child, or the terminal events that have been described for Kristin Inwood which would help you as a clinician to assess whether or not in fact Lasix was given to the child?

A. Well, you see, after the first Lasix was given at 2310, it is recorded that the child voided, had put out some urine, a very short time after the second injection the child is terminal. It doesn't say whether it had any output



of urine, it is only a short interval. No, I can't say any more than I have said about this child.

- Q. Thank you, Doctor. May we turn then if you would to the case of Kevin Pacsai, and your handwritten notes with respect to this child begin at page 88 of the bound volume of your case reviews, page 88, Doctor.
  - A. Yes, I have it, yes.
- Q. Doctor, once again could you outline for us if you would, please, those factors that you considered to be of significance in assessing this case with the possible involvement of digoxin intoxication?
- month of age at the time of his death. First of all there was no significant anatomical abnormality, in fact the heart was found to be normal anatomically at autopsy. The child had a post mortem blood level of 26 nanograms per millilitre, which is high, but I don't know where the blood was taken from and when it was taken and how long after death. The child died with a cardiac arrythmia, a brady/tachy arrythmia, where the heart rate went down to a low level 50-60 and up again to 150. The child developed



one of the depressant effects of digitalis to which

I referred earlier, a two to one heart block, this

occurs with digitalis toxicity, and then the child

goes into ventricular fibrillation which is arrest,

which is a terminal event, unless it can be defibrillated and a proper rhythm restored.

So taking that the child had no heart disease anatomically; that the child had a dig. level recorded post mortem; and that the child died with a cardiac arrythmia which could have been digitalis induced, in the setting which I was looking at the chart I thought that this was probably digitalis intoxication.

Q. Doctor, we know from our earlier reference to the minutes of September 13th meeting that this was not a case discussed in detail at that meeting. Your conclusion with respect to this case is set out in your typewritten case review at page 87, and you indicate:

"Post mortem blood level was 28 mg/ml, and therefore a high probability of digitalis toxicity being the cause of death."

Doctor, I do not in your handwritten



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notes or indeed in your typewritten case review see any note made of any toxicology that may have been available with respect to this child, other than the post mortem blood level of 26 nanograms. Do you recall in fact whether or not at the time you were reaching your conclusion in this case you had available to you the results of the toxicology tests that had been conducted by Mr. Cimbura?

A. Yes.

THE COMMISSIONER: It is on page 88,

isn't it?

THE WITNESS: Yes, I think I must

have.

THE COMMISSIONER: I'm sorry, the third last line:

"Dig. toxicity post mortem blood level 26 nanograms."

Q. Yes, I am sorry, sir. You will recall of course that there was a blood specimen tested at the Hospital for Sick Children.

THE COMMISSIONER: Oh, you are asking about the ante mortem, I beg your pardon.

MS. CRONK: That is right.

MR. ROLAND: My friend also in her



question introduced the fact, and I don't think the doctor said this morning, in fact he said the contrary; she said, the question, the very long question, she said, we know this was one of the babies that was not extensively discussed at the meeting of September 13th. That is not what the Doctor said. The Doctor said there was, at least when talking about Cook, there was extensive discussion and that is why he noted on his card "A" plus.

THE COMMISSIONER: All right.



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MR. ROLAND: If I understood his evidence all of them were discussed extensively. It is simply that it wasn't summarized; the discussion wasn't summarized in the minutes, but he said, for instance, with Cook there was an extensive discussion.

MS. CRONK: Well, I'm sorry, sir.

I may have misunderstood the Doctor's evidence this
morning, and if so I will attempt to clarify it.

Q. Do you recall, Dr. Fay, a discussion in detail with respect to this case having occurred at the meeting of September 13?

A. I can't recall any extensive discussion. I think that these four patients, these four children were discussed, but I think that we went on fairly rapidly into the ones where it was considered that there wouldn't be any great - into ones where it was considered there might be differences of opinion or discussion required to come to conclusions and so forth, but these I don't think there was any extensive discussion with the four you have mentioned. I can't remember it and it doesn't appear in the minutes.

MS. CRONK: I am grateful to my friend, Mr. Commissioner. It is apparent that I misunderstood the Doctor.



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MR. ROLAND: I may have misunderstood too, so I think we have it, we have probably compromised, there was some discussion but not extensive discussion.

THE COMMISSIONER: Well there could have been vast amounts of discussion from these minutes, but the discussion seems to have been more of a narrative nature than it was to discuss how the children died. That is as I read the minutes, and that's what I think happened. We are not so much interested in what you have to say about these four children; we want to get on and discuss the others. That is one of the more leading questions of the century. Is that what happened?

THE WITNESS: Yes, I think it is what happened. It is what I recall that we didn't spend a lot of time discussing these four patients.

THE COMMISSIONER: No.

MS. CRONK: Q. Doctor, may I return then to the question I asked you a few moments ago?

There is clearly reference both in your typewritten case review and in your handwritten notes to the digoxin level that was found in the post mortem blood sample of Kevin Pacsai --

A. Yes.



Q. -- a level of 26 nanograms.

There is not, however, mention made of any of the toxicology results on various tissue samples which were assayed by Mr. Cimbura at the Centre for Forensic Sciences. Was that information available to you as best you can recall it, Doctor, at any time when you were reviewing this case in reaching your conclusions with respect to the possible involvement of digoxin intoxication?

A. You know I don't think it was because if it had been made available to me I don't think I would have been so negligent as to not write it down somewhere on these notes.

I mean after all I was doing a review, and if you give me material which is relevant and pertinent to consideration of how this child died or by, you know, whether digitalis toxicity was to be considered, then if you give me toxicology then I am going to include it in these notes, and I don't have it here. I don't recall seeing it.

Q. Thank you, Doctor.

Doctor, at the time you were reviewing this case were you aware that an ante mortem blood sample from Kevin Pacsai had resulted in a level of greater than 10 nanograms of digoxin? Do you recall





that information having been made available to you or observing that in the medical record when you reviewed it?

A. No, and I can't - I can't believe that this is not absolute. Obviously we live in an imperfect world but I cannot believe if that had been made available to me I wouldn't put it in my notes.

Q. Doctor, do you recall at any stage having been informed that a post mortem blood sample from the body of Kevin Pacsai had been tested at Mount Sinai Hospital and that a digoxin level of 112 nanograms had been obtained? Do you recall being informed of that?

A. I can't remember this, and I want to be fair, Mr. Commissioner.

I wasn't told that I couldn't get in touch with Mr. Cimbura and ask for this I didn't, and it wasn't given to me.

THE COMMISSIONER: I am not sure that that information was given to anybody. Are we talking about the Mount Sinai?

MS. CRONK: Yes we are, sir.

THE COMMISSIONER: Well, that wasn't passed on to anyone, that information, so it would be



unlikely that Dr. Fay would have it. This was done by Dr. Ellis, wasn't it?

MS. CRONK: I'm sorry, sir?

THE COMMISSIONER: Wasn't this the one sent over by Dr. Ellis?

MS. CRONK: That is correct, sir.

The meeting at which Dr. Fay attended was of course in September, 1982.

THE COMMISSIONER: Yes, but I thought no one received that information.

MS. CRONK: I am not sure that the evidence is clearly established that the examination of --

THE COMMISSIONER: No. All right.

MR. ROLAND: To be fair to the

Doctor too, Mr. Commissioner, he does in his notes

indicate digoxin toxicity post mortem blood level

26 nanograms, and that is about the level shown in

the chart. It is also the level shown in Mr. Cimbura's

results as well.

THE COMMISSIONER: Yes.

MR. ROLAND: At page 5 of Exhibit 95, so that may have come from Mr. Cimbura; it may have come from the chart.

MS. CRONK: My question, of course,



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was directed to the results on the tissue samples made by Mr. Cimbura.

Q. Doctor, if the evidence before the Commissioner were to clearly establish that an ante mortem digoxin level from a blood specimen of Kevin Pacsai had been taken at the Hospital for Sick Children and that a level of greater than 10 nanograms had resulted on assay of that specimen, would that fact be considered to be relevant by you in assessing or categorizing the death of this child.

A. Yes, because if the specimen had been correctly assayed, and I can't believe that it wouldn't have been, and this was an ante mortem blood sample then that puts it in the definitely toxic range, even for an infant, and therefore I would put considerable emphasis on that finding.

Q. Would that be so, Doctor, if the level was in fact only 10 or slightly higher?

A. Well, 10 nanograms per millilitre of digoxin is a very high level clinically.

I mean we are talking of extremely high figures
here, and I said at the outset - the Commissioner
asked me I think that the 3.5 might still be within
the range where you wouldn't have toxic symptoms in
an infant although you would certainly be very



worried about it in an adult - concerned about it in an adult, but 10 nanograms is a different matter.

If that is a correct assay, and I can only presume it is, then that is digitalis toxicity even in an infant as far as I am concerned. If that is a correct assay.

Q. Thank you, Doctor.

Doctor, as part of the review which you did conduct of Kevin Pacsai's medical record do you recall having observed potassium levels which were experienced by Kevin Pacsai in the day or two prior to his death and on the death of his death?

A. I have no note of serum digoxin levels here.

Q. To help you with that, Doctor, the medical record of Kevin Pacsai which is filed in these proceedings indicates at page 81 of the medical record --

A. Yes.

Q. -- indicates that an assay conducted on March the 11th resulted in a potassium level of 3.9, that an assay conducted on March 12th, the morning of Kevin Pacsai's death at 6:30 a.m. resulted in a potassium level of 9 and that an assay conducted at 7:20 a.m., the same day, resulted in a



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level of 7.7?

A. Yes.

Q. Doctor, do those potassium levels on the day before his death and the morning of his death cause you any --

THE COMMISSIONER: Everybody sort of ignored the 9 because of the hemolysis question.

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THE WITNESS: Well that would be my first question --

MS. CRONK: Q. I am sorry, Doctor, fairly the evidence is that the 9 was an hemolyzed sample, but with respect to the potassium levels, with that kind of a history of those levels in this child, do you attach any significance to those levels?

A. Well, let's move to the 7.7. If that is a correct and we are dealing with a good sample, that is hyperkalemia; that is a high potassium and that will aggravate - can aggravate digitalis toxicity.

Doctor, are you familiar with a condition that has been described before the Commissioner as transient adrenal insufficiency?

A. I am not sure that I quite understand what you are talking of in transient adrenal insufficiency. Can you tell me more about this?

I don't want to get myself in 0. some difficulty here. If you are not familiar with the condition, Doctor, I don't propose to deal with the matter.

Are we talking about a condition A. in babies --



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Q. Well, to help you with that the evidence from Dr. Harry Bain --

> Yes. Α.

-- who has testified before the (). Commission has been that in light of the high potassium levels and the clinical history of this child he felt that a condition which he described as transient adrenal insufficiency could have accounted for this child's death. That evidence, of course, is in Dr. Bain's report, Exhibit 48, and in his oral evidence.

Are you sufficiently familiar in any way with that condition, Doctor, to express an opinion as to whether or not it might have applied in this case?

A. No, I am not, but I am sufficiently acquainted with Dr. Bain to put a lot of emphasis on him. He is a very experienced paediatrician. If he says that I pay great attention to it.

Q. Thank you, Doctor.

Mr. Commissioner, I am about to turn to the case of Janice Estrella.

THE COMMISSIONER: We should rise now? Is that the question? It is only ten to one by that



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clock if that is correct.

MS. CRONK: All right.

THE COMMISSIONER: How long do you

expect to be?

MS. CRONK: Oh, no, that is fine, sir.

I will try to finish with this case before lunch.

THE COMMISSIONER: Yes. All right.

MS. CRONK: Q Doctor, could I ask you to turn to page 68 if you would of your case reviews to the case of Janice Estrella. Do you have that, Doctor?

A. Yes, I have.

Q. Doctor, once again as you have with the other cases could you outline for us, please, those factors that you consider to be of significance in this case in conducting your review?

Mell, this child was about four months of age when she died and she had a Down's syndrome, and she had the usual congenital, the commonly found congenital cardiac malformation with the Down's syndrome, the so-called AV canal which I am sure Dr. Rowe has described.

She underwent repair of this and then on the 22nd postoperative day which is usually at a time that one has gotten over the immediate problems,



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but she developed again a brady arrythmia and became under low blood pressure for which she received
appropriate treatment. And then four days later again
she suddenly developed this slow heart rhythm and
she stops breathing, heart stops beating and she dies;
is pronounced dead, cardiorespiratory arrest.

The surgical repair is found to be intact at autopsy. There is nothing incorrect there.

She has again a post mortem serum digoxin level in a very high range: 72 nanograms per millilitre, so here we have a child who has important congenital heart disease, undergoes surgery, gets through the immediate postoperative period and then has two periods of bradycardia, and with the second period she arrests, she has respiratory arrest and is found post mortem to have this high serum digoxin level of 72 nanograms per millilitre, and in that setting and looking at this chart from the point of view that I have been asked to look at it, I would put her in the highly probable or probable category.

Q. Doctor, in your typewritten case review --

A. Yes.

Q. -- you in fact conclude as you have suggested that this child's death - I am sorry,



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you record that this child's death was attributed to digitalis overdose at the meeting at The Hospital for Sick Children in September, 1982, and you indicate as well at the beginning of that paragraph:

"At autopsy the repair of the congenital heart defect appeared to be intact and the post mortem digoxin level was 72 nanograms per millilitre."

Doctor, other than that post mortem blood digoxin level of 72 nanograms were you informed or aware at the time that you were conducting the review of this case that a second post mortem blood specimen had been obtained from the case of Janice Estrella and that a digoxin level of greater than 4.7 had been recorded?

A. I don't think so. There was one meeting at The Hospital for Sick Children one afternoon. It was a short meeting and I think it took place after one of those meetings at the Police Headquarters. We went to Sick Children's.

Dr. Hastreiter was there. I don't know who was chairing the meeting. I didn't take any notes at the meeting. Whether that information was produced at the meeting or not I can't say.



/BM/ak

But I don't think we had minutes of that particular meeting. It suggests that the only outstanding meeting I can remember — there were those at the Police Department, that one that we have referred to several times on September 13th and one other short meeting. Whether it came out there I don't know, but I didn't make a note at the time. I probably didn't have my notes with me, so, I didn't know that.

Q. Doctor, you have outlined a number of features that you considered to be significant from the clinical condition and the course of this child while at the Hospital for Sick Children.

Can you tell me which of those factors led you directly to the conclusion in this case that there was a probable overdose of digoxin administered to this child?

A. Well, this child has serious heart disease but, as I say, has come through the immediate postoperative period and would ordinarily be very much convalescent from such surgery and, in fact, at autopsy is found to have an intact surgical repair. Now, be that as it may it is still possible that this child develops arrhythmias and hypotension and goes into cardiac arrest simply



because the child has a serious heart disease, even though it has been repaired surgically. So, that is a possibility. However, I am looking at the case now after the fact, and I am not caring for the child at the time, looking at it after the fact and I am looking at the arrhythmias that occur and then I am given a serum digoxin level post mortem which sounds high to me, sounds very high at 72 nanograms per millilitre. So, again, in the context at which I am looking at this child's medical history, this chart, I have to put her in the high category - Probability.

Q. I take it then, Doctor, on the basis of what you have just said that it was the fact of the arrhythmias and the type of arrhythmias experienced by the child, coupled with the post mortem level which you were aware that led you in this case to conclude that she was properly to be placed in the Probable category. Do I understand that correctly?

A. Yes, quite correctly.

THE COMMISSIONER: And the progress of the operation.

THE WITNESS: Yes. I am perfectly aware that one man's probability is another's



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possibility and it is up to attorneys to try and make the distinction, but I would put her in the Probability as high for her.

Q. Doctor, you have told us that as best as you can recall it you were not aware of the second post mortem digoxin level in this child.

Were you aware at the time that you reviewed this case that on January 7, 1981, four days prior to Janice Estrella's death, digoxin was ordered Held and was not known to have been prescribed again prior to her death. Were you aware of that fact, Doctor?

A. I haven't recorded it here.

On the 11th of January I've got the events that occurred on the postoperative day, which was the 7th of January and the 11th of January but I haven't put in the digoxin orders. I haven't got them recorded here and if I knew that I didn't record that.

Q. Does that fact, now that it has been brought to your attention, Doctor, influence in any way the conclusions which you formed in this case?

A. May I ask for that once more. Digoxin was held...?

Q. Yes, digoxin was ordered Held on January 7th.



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| Α. | Yes |

- 0. Four days prior to the death of the child?
  - Α. Yes.
- And was not known to have been 0. prescribed or administered again prior to her death on January 11th?
- Well, I wouldn't that makes it to me an even more significant finding because there would have had to have been a major clearance of ordinary digoxin serum levels by a period of four days, very much so. So, 72 nanograms in that setting, it becomes even more significant to me.
- Ο. Doctor, I note as well and, thank you, there is in neither your handwritten notes nor your typewritten case review any mention made of the type of sample or the circumstances under which the sample was taken that resulted in the post mortem digoxin level of 72 nanograms. Were you aware, Doctor, that the specimen which resulted in that reading of 72 nanograms was drawn from the pelvic cavity of this child some three hours, approximately, after autopsy?
- A. No, I wasn't and if it were drawn from a vein, which I presume it was, blood



autopsy.

vessel anyway - must have been a vein - I would still think that that is very significant. I might think it less significant if it were drawn from the cardiac cavity because of leaching out of digoxin into the intracardiac blood post mortem, but this had an interval of four days from the last recorded digitalis digoxin level dosage, the last digoxin being given to the child still seems to me to be very high.

Q. Well, fairly, Doctor, the evidence before the Commissioner to date has been that that specimen which resulted in that level was drawn from the pelvic cavity.

- A. The pelvic cavity?
- Q. The pelvic cavity. It was described as a gutter blood specimen.
  - A. Ah, I'm sorry.
  - Q. From Janice Estrella.
  - A. I misunderstood that.
  - $\Omega_{ullet}$  Taken some three hours after

A. I don't know what this gutter blood is. I mean, I have heard Mr. Cimbura talk about it and I really can't give you an opinion, it is really beyond my expertise.

Q. Doctor, during the course of



your review of Janice Estrella's chart, do you recall whether or not you made reference to the final autopsy report which had been prepared in that case?

A. I didn't make a note of seeing a final autopsy report. I don't know whether I did see it or whether it was...

Q. I'm sorry, Doctor. Mr. Registrar, could you kindly show the Doctor Exhibit 91, which is the medical record, Doctor, of Janice Estrella.

Doctor, it is a rather large medical record but thankfully the final autopsy report appears at the beginning of the chart and I would ask you to turn if you would to page 12. Doctor, this is page 2 of the pathological discussion section of the final autopsy report on Janice Estrella. It is preceded by the front two pages of the final autopsy report form.

Do you recall, Doctor, sitting here today, when you reviewed the medical record of this child, whether or not the autopsy report was contained in the medical record and, if so, whether you reviewed it?

A. Well, all I can say is that in the majority of notes I think - I don't know, I would have to count them - I have made notes of the



autopsy report which reads:

I would have omitted to put in the autopsy findings in this child if they had been there, but I could be mistaken.

Q. All right. Doctor, I draw your attention simply to the last paragraph of the final

autopsy findings and I don't think that I would have -

I don't think, I don't know - but I don't think that

"Samples of post mortem blood were obtained for assay of digoxin levels. These samples were contaminated slightly by edema fluid and ascitic fluid. The digoxin levels on these samples measures 72 nanograms per millilitre, toxic range 2 to 9 nanograms per millilitre blood. This level is markedly elevated over the normal therapeutic range and if accurate would explain the death of the patient."

Does the language in the concluding paragraph of the autopsy report assist you in any way, Doctor, in refreshing your memory as to whether or not it was available to you at the time that you undertook the review in this case?



| A. Well, if it were there - I got                    |
|--|
| the 72 nanograms from somewhere but if it had been   |
| there I think that the least I would have done would |
| be to have copied out the anatomical diagnosis as    |
| listed because I have done it very frequently in     |
| the other cases, or many of the other cases I have   |
| done it. So, I think maybe it wasn't.                |

Q. Well, to be fair, Doctor, at page 68 of your handwritten notes.

A. Yes.

Q. You do make a reference to the repair of the congenital heart defect.

A. Yes.

Q. And you indicate that it appeared intact at autopsy. Did the purity of the sample involved, Doctor, which resulted in the level of 72 nanograms constitute an issue in your mind in any way at the time that you were reaching the conclusion that you did reach in this case?

A. No, I don't think it did.

There were times when Mr. Cimbura was, you know,
on the few meetings we had, refer to gutter blood
and things like that and leaching from the myocardium
and so forth, but no, that would not I think have
made very much difference to me in assessing whether



or not there was a good probability of digitalis intoxication. I just wonder where I did get the 72 nanograms. I would certainly like to just go through this chart some time and see if I didn't spot it in some other part of the chart.

Q. Doctor, as it happens, it is perhaps an appropriate time to break for lunch at this stage.

THE COMMISSIONER: Yes. I don't think you will find it anywhere. I wouldn't be too optimistic of my chances of finding it because that is something, as I remember it, that was taken shortly after autopsy and everybody considered it to be of no importance and it wasn't reported until later in March and I think the only place it appears is in the autopsy report.

THE WITNESS: Yes.

THE COMMISSIONER: All right, until

MS. CRONK: Thank you, sir.

---Luncheon recess.

2:30 then.





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--- Upon resuming:

THE COMMISSIONER: Yes, Mr. Young?

MR. YOUNG: Mr. Commissioner, I wonder

Firstly, Mr. Commissioner, I should

if I might interrupt for a moment?

THE COMMISSIONER: Yes.

MR. YOUNG: Before we get under way this afternoon.

THE COMMISSIONER: Yes.

MR. YOUNG: There are a few comments I would briefly make at this time with respect to the Minutes that have been entered as Exhibit 261.

tell you that Mr. Lamek and Mr. Percival had a discussion last Friday about these very Minutes going in. It was agreed that they would go in, but I feel I must rise at this time and inform you that Mr. Percival and myself feel that there is an argument that they relate to the second phase, clearly that the meeting was conducted during the second phase. That is not to say that there is no argument that they don't also deal with the cause of death, and because of that we didn't object to the Minutes being marked as an exhibit. That is not to say again, Mr. Commissioner, that at some time in the future we might not have a similar objection and we did want





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that on the record.

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I should also tell you, Mr. Commissioner, that in discussing this matter with the investigating officers, the purpose of this meeting that the witness attended was to reach some sort of consensus, and in fact those are his words as well, and as also appeared in the Minutes, to reach some sort of consensus in order to provide the parents of at least some of these children with some idea, some assurance where possible of the cause of death. That was utmost in the police officer's mind, and I suspect in the minds of the Crown and the Coroner's Office.

What actually happened with the results of this meeting was that the three categories were later reduced down to two categories and we will hear evidence about that at a later date. Of those two categories the parents - the only parents who were informed of the results were parents whose children it had been determined had died as a result of natural causes.

I think it is important to approach this meeting and the comments that were made during the meeting with that in mind.

I might also say, Mr. Commissioner, at this time as I briefly suggested this morning that





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the young lady who was invited at the last minute to attend this meeting was asked to be sure to record exactly what the various individuals' opinions were when it came time to vote, or when they were asked for those very opinions. She also tried to take down some of the details and highlights of the discussion that occurred before and after the particular votes. She didn't succeed in all the circumstances; she wasn't familiar with all the terminology; she hadn't, as you well know, Mr. Commissioner, this is a very complex matter. She was not familiar with which which - what aspects were of great importance, and when comments were made she might have misinterpreted them. But what is accurate, and I think the doctor will agree and certainly the police officers present do agree that the votes, the final opinions were those expressed by the parties and they are accurately recorded in those minutes.

> THE COMMISSIONER: Thank you, Mr. Young. Yes, Mr. Hunt?

MR. HUNT: Mr. Commissioner, if I could just make a comment. As my friend has indicated the purpose of this meeting ---

THE COMMISSIONER: Could I see that exhibit, the Minutes? Yes, all right.





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MR. HUNT: The purpose of this meeting was in fact to come to a consensus to deal with the parents who were very concerned as a result of the findings of Judge Vanek no doubt, with respect to the four babies in question at the Preliminary Hearing.

Mr. Wiley who you will be hearing from at another stage in this proceeding, reflected at page 6 of the Minutes as in fact making that point in connection with the Baby Inwood, in the first full paragraph where he remarked with respect to the decisions they were making, it should not be looked at from the point of view of proving cause of death and going to court, as to come to a conclusion to discuss with the parents.

I think before we get too far into the question of what these Minutes suggest occurred it has to be put in the proper perspective, that is it occurred after the findings by Judge Vanek with respect to certain babies and after the investigation proceeded the parents be notified as to the results.

THE COMMISSIONER: Yes, thank you, Mr. Hunt. Mr. Strathy, do you have something? MR. STRATHY: No, thank you, Mr. Commissioner.

THE COMMISSIONER: Yes. I was just



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thinking, Miss Kitely, I sometimes do reflect on some of the things I said. I don't mean, I did not mean this morning to indicate that when the time comes for the distribution of the police reports that if there is something in that distribution which you don't want to become public property that you can't argue the question, you certainly can, I don't intend to make unilateral decisions. Unless, first of all the police come up with an offer, we can't do anything except argue the question whether the whole thing becomes, should be produced or not.

is that the police have to come forward and say that we are prepared to have this amount, that is this censored version, and no one suggests it shouldn't be censored in some way, and produce it. At that point you will see that, and if there is something in that that you don't think should be produced, that should become public property, then you can certainly argue the question at that time.

MR. STRATHY: Thank you, sir.

THE COMMISSIONER: All right. Now,

anything else? No, all right then, Miss Cronk.

MS. CRONK: Thank you, sir.

Q. Dr. Fay, prior to the lunch break



we were discussing the case of Janice Estrella, and I drew to your attention the fact that in that case digoxin was ordered held on January the 7th, four days before the child died. It was not known to have been prescribed or administered thereafter. You told me I believe that as best you can recall it you did not think you had previously been aware of that fact. Did I understand your evidence correctly?

A. If I had been aware of that I didn't note it down; so if I was aware of it I can't remember that I was aware of it.

Q. Did you in fact, Doctor, in reviewing the medical record of Janice Estrella look to see what digoxin, if any, had been ordered and administered to this child?

A. Yes. I am fairly certain I looked at the dosage of digoxin administered, but I can't remember that break of four days when digoxin had not been administered prior to the child's death.

Q. I ask you that question, Doctor, because on a review of both your handwritten notes and the typewritten version of your case review, I do not see any reference made in those documents as to the actual doses which were prescribed and administered to the child prior to January the 7th.



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A. No, I don't see it either.

Q. Do I understand you then to be saying, Doctor, that you do recall in reviewing the medical record looking to the actual doses that had been prescribed and ordered to be administered to the child?

At this stage of 15 months or so I cannot give you any detailed truthful reply to that. I looked at the charts very thoroughly, it was not a rushed examination that I made of the record, it was a very thoughtful, very, what shall I say, very slow and methodical as far as I could make it. It is not easy to review charts, I looked at the digoxin dosage for all the children as far as I recall. In this particular child I have not put down the dosage ordered. Neither have I made a note of there being a hiatus of four days between the last dose and the child's date of death. So I cannot be sure, but apart from the hiatus matter, I looked at the dosage in every case; and in no cases I recall did I find in the actual order digoxin, anything untoward or out of the way, all the digoxin orders which I read in the charts as I recall were perfectly reasonable dosage.

Q. Doctor, I am obliged to ask you



as well when you reviewed this medical record did you attempt to ascertain what the reported digoxin levels during life had been on this child?

A. I looked for any digoxin levels that were reported, and as far as I am aware I noted them down when I came across them if I thought that they were - certainly if they were near to the date of the child's death, I think I recorded them as I found them, but I don't have that here either.

Q. Doctor, were you aware as best you can recall it, based on your review of this child's chart, that on January the 7th, again four days prior to her death, she had a digoxin level of greater than 5 nanograms, which this Commission has heard was in fact a level of 9.4 nanograms; were you aware of that at the time you reviewed this case?

THE COMMISSIONER: What was that again, what did you say the level was?

MS. CRONK: I asked Dr. Fay whether or not he was aware that on January the 7th Janice

Estrella had a digoxin level of greater than 5 nanograms which the evidence before you, sir, has indicated was in fact a reading on dilution of 9.4 nanograms.

You recall, Mr. Commissioner, that the actual number on dilution is in Dr. Ellis' Digoxin Book.



THE COMMISSIONER: That is not from the chart though, is it?

MS. CRONK: At page 159 of the chart, sir, the digoxin level reading on January the 7th indicates a level of greater than 5.

THE COMMISSIONER: Yes, you are quite right, yes, I have a note here it was 9.4, you are quite right.

 $\mbox{MS. CRONK:} \quad \mbox{Q.} \quad \mbox{I am sorry, would you}$  like to see the chart?

A. Yes.

Q. Could you refer to page 159 if you would, please; page 159, Doctor, you will see there that on January the 7th, 1981, the digoxin level was recorded at greater than 5 nanograms. Were you aware of that, Doctor, at the time that you reviewed this child's medical records?

A. This I presume was in the chart, and if I read it I didn't note it which surprises me, but I don't know that I did see it. I might have overlooked it but I don't think I did. If I saw it I didn't note it.

Q. Similarly, Doctor, you will notice on the same page that a digoxin level is reported for Janice Estrella on January the 8th of





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greater than 4.7 nanograms; the evidence Before this Commission has suggested that that level was in fact a level of 7.8 nanograms on further dilution.



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And finally on January 9th, two days before the child died, her digoxin level had fallen to 4.7 nanograms.

Do you have any recollection today, Doctor, with respect to those two latter levels of having noticed them in the medical record when you reviewed this child's chart?

A. All I can say is that if I noticed them I didn't note them down which I usually did, and all I can say is that if I noted them then there was nothing inconsistent with a very high post mortem digoxin level. So that they are, as you described them in the 7 nanograms per millilitre range is in the toxic range. It wasn't quoted as high as that but still it is high. It is in the, if you like, the low toxic range for an infant, and it certainly fits with the high suspicion or probability of digitalis intoxication as manifested by the very high post mortem blood level.

 $\ensuremath{\text{Q}}$  . Doctor, on the basis of what you have told us --

MR. ROLAND: Just so that the record is clear, and I had to check this because I wasn't certain myself, we have heard this evidence some time ago. I think my friend said that the reading



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on January 7th was 9.4, and I have checked Dr. Ellis' book and it is in fact greater than 9.4.

MS. CRONK: I beg your pardon. Thank you.

Q. Doctor, on the basis of the evidence that you have given this morning as to what you regard to be a toxic digoxin level in an infant, can we agree that a level of greater than 9.4 nanograms in Janice Estrella on January 7th is a matter of significance?

A. Oh, yes, I would have to say that.

Q. Similarly a level of greater than 4.7 nanograms on January 8th is as well a matter of significance in the clinical history of that child?

A . Yes, I think even in an infant, appropos of what I have said this morning even in an infant I would be concerned at a level of 4.7, and presumably that was the reason for the order being written to hold the digoxin.

- Q. On January 7th?
- A. Yes.
- Q. Doctor, you were unaware as to what the actual ante mortem digoxin levels were for



this child during life. That is the three levels to which I have just referred you on January 7th, the 8th and the 9th. How could you in this case form any opinion as to the possible involvement of digoxin intoxication in the death of the child?

A. Only from what I said, that there is a very high post mortem blood digoxin level, and I don't have any record of hearing that that is a falsely positive, falsely high level.

I haven't got anything from Mr. Cimbura, either from the September 13th meeting or any other time to say that one should be on one's guard against interpreting that as a very high level, and this child has this bradycardia and finally a bradycardic asystole which would go along with digitalis intoxication. That is really all I can say.

Q. Doctor, can we agree that in assessing the significance as a clinician of a post mortem digoxin level in any particular case the history of the involved patient with respect to digoxin during life is a matter that would be of considerable assistance to the clinician attempting to assess the significance of the post mortem level.

- A. Oh, yes.
- Q. Do you agree?



A. Oh, yes, yes.

Q. Doctor, with respect to that post mortem level of 72 nanograms I would ask you to turn to page 156 of Janice Estrella's medical record if you would, please.

Do you have that, Doctor?

A. Yes.

Q. Doctor, you will see that this is a biochemistry clinical form or printout which records that on January 11th, 1981 there was a digoxin level of 72 nanograms recorded on Janice Estrella. As well there is a notation in handwriting on the right-hand side of the page, "mainly gutter fluid".

evidence correctly this morning, Doctor, that you did not have any recollection as to an issue having been raised at the time you were reviewing this case that that sample may have been impure in any way. And seeing this biochemistry printout, Doctor, does it assist you in recalling whether or not you knew at the time that you were formulating an opinion in this case that there was an issue as to the purity of that sample?

A. No, there was not at the time



I was formulating an opinion.

There were comments from time to time, once or twice at least, from Mr. Cimbura about the purity of the sample obtained post mortem. The word "gutter fluid" came in several times. Precisely what was meant and what gutter was being referred to was never made clear. There were a number of gutters. And in fact I again would have to be guided by the toxicologists as to what might have raised the digoxin level in the blood from a gutter sample.

I took it at the time to be significant because of the high level of digoxin that I was reading about. How much the guttering of the blood had to do with the raising of the digoxin level I have not the slightest idea.

Q . Do you recall, Doctor, in the course of reviewing the records of this child making note of any of the biochemistry printout forms with respect to the digoxin levels that had been recorded both ante mortem and post mortem?

A. I haven't made any notes of digoxin levels ante mortem, no.

THE COMMISSIONER: Miss Cronk, I can't remember, did we have - you would have no idea who



wrote that note "mainly gutter blood", or do we?

MS. CRONK: The evidence is not yet established before you, Mr. Commissioner, whose handwriting that is.

It is, however, our information that it is an officer of the Metropolitan Toronto Police Force.

## Doctor, may we ---

THE COMMISSIONER: The only reason I mention that is we don't know whether that was there when the chart was reviewed, or do we?

MR. YOUNG: I don't know whether I can assist you on that, Mr. Commissioner. I believe that wasn't there until well after the gutter blood study was done but I will try to determine that fact.

THE COMMISSIONER: Yes. All right.

Now I didn't understand from that last answer whether for instance at the meeting - at this meeting of September 13th you didn't discuss Estrella, or at least not in depth.

## THE WITNESS: No.

MS. CRONK: Q. Doctor, in the same vein may I return for a moment to the case of Kevin Pacsai. As I understood your evidence this morning



you told me that you were not aware at the time that you reviewed that case that an ante mortem blood specimen from Kevin Pacsai taken on the morning of his death had resulted in a digoxin level of greater than 10 nanograms.

Did I understand you correctly?

- A. Yes.
- Q. And you told me I believe that that fact had you known it would have been regarded by you as very significant in the assessment of this case. Do I understand that correctly as well?
- A. Yes, I believe I said that provided one can rely on the accuracy of the assay then it is most significant to my mind.
- Q. Doctor, once again in all of these cases and particularly in the case of Kevin Pacsai were you not concerned in undertaking your review of his medical record to determine what his digoxin levels had in fact been during life if any had been taken?
- A. Yes, I was concerned to know all I could, but I had the charts in front of me and I was left to my own devices, and I was not sitting down with a toxicologist and discussing anything at all. Never did. Never had any communication



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with him. Never got any reports myself. Never saw the reports. So that I proceeded as I understood I was to proceed which again as I say was simply indicated to me quite briefly and verbally and reviewed the charts as best I could.

Q. Doctor, I don't know if you have the medical record of Kevin Pacsai there.

Mr. Registrar, it is Exhibit 106.

Doctor, I would ask you to turn if you would, please, to page 83. Do you have that, Doctor?

A . Yes.

Q. You will see, Doctor, once again that there is a biochemistry or clinical chemistry computer report and it sets forth first amongst other matters the potassium levels which I drew your attention earlier this morning?

A. Yes.

Q. Levels recorded on March 11th of 3.9, a level on March 12th of 9.0 and the subsequent level on March 12th of 7.7.

It also sets out, Doctor, a level, a digoxin level reported on March 12th of greater than 10 milligrams. Do you see that, Doctor?

A. Yes.



Q. Doctor, do you have any recollection of having reviewed the biochemistry printout forms during the course of your review of Kevin Pacsai's medical record?

A. I looked at a great many obviously of these printout forms in this review.

I cannot remember individual forms and I cannot - I can't say that I definitely saw and noted them if I haven't made a note about them.



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Q. I understand, Doctor. Doctor, can we agree, having regard to the significance which you have told us you would attach to that ante mortem level, had you known about it, that that information, that is the ante mortem digoxin levels obtained on this child would have been of fundamental importance to you in arriving at your opinion in this case?

A. Well, of course, as I have indicated, I am going on the mode of death, what happened at the time the child died and I'm looking particularly for evidence of digitalis excess. Clearly a reading of greater than 10 nanograms per millilitre on the day or on the morning of the child's death must, in the context of my reivew, be considered very important, very significant. I can't think of it in any other way.

Q. Thank you, Doctor. Doctor, with respect to that level as well, as I understood your evidence this morning, you told me that an ante mortem level of 10 nanograms, or even close to 10, 10 per se would be regarded by you as very signficant because it was in the toxic range for infants. Did I understand you correctly?

A. As far as I am concerned,



again, allowing that you can rely on your assay, a serum digoxin level in the range of 9 or 10 is definitely and unequivocally in the toxic range.

Q. Doctor, we have seen in the case of Janice Estrella that on January 7th, again, four days before her death, we looked at this a moment ago, she had a digoxin level of greater than 9.4 nanograms. It is clear on the face of the medical record that although that was the level on January 7th she in fact survived another four days until January 11th.

- A. Yes.
- Q. Under those circumstances,

  Doctor, having regard to the case of Janice Estrella,

  can we agree that an ante mortem digoxin level of

  10 in an infant of and in itself does not necessarily

  establish first that the child will die, that is not

  necessarily the result from a level of that kind?
- A. Oh, no, I didn't draw any such conclusion. I said it was in the toxic range.
- Q. And similarly, Doctor, can we also agree that a level of 10, digoxin level of 10 without more does not necessarily determine whether or not if the child does die the death is attributable to digoxin intoxication?



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| A. I don't think it would be                        |
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| possible to draw such far reaching conclusions from |
| just that but I still see if one can rely on the    |
| assay and one has a report of 9 or 10 nanograms per |
| millilitre, I think even in an infant that one is   |
| in the toxic range for digoxin, digitalis.          |

- Doctor, in your view, is it Q. possible for an infant, a child, to have an ante mortem digoxin level of 10 and yet not display any symptoms clinically of digoxin intoxication?
- Well, that seems to have been the case, that seems to have been the case. It is somewhat surprising. Again, I think you are coming back to, are you sure of the assay, are you sure what you are measuring, absolutely certain that you are measuring digoxin. If you are certain that that is digoxin at 10 nanograms per millilitres it is in the toxic range. I don't know any publications that suggests that you can have - perhaps you can correct me - a digoxin reading which you are relying on as digoxin in that range and not be in the toxic range.
- Q. Perhaps my question could be put more fairly this way, Dr. Fay. Whatever the toxic range might be, and we know what in your view is the toxic range in an infant, in your experience



is it possible for an infant to have a digoxin level in the toxic range and yet not display clinically symptoms of digoxin intoxication?

A. Yes. I suppose it would be.

There is great variability in this situation, there
is great individual variability and there is great
biologic variability and I would think that it is
within the bounds of possibility certainly, but I
would still, given that data and asked what I thought
of that I would have to say that is a toxic level of
digoxin.

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Doctor, may we turn now if you would to the case of Jesse Belanger. Your handwritten notes with respect to this child begin at page 63.

They actually continue for a number of pages, Doctor, but in substance they commence at page 65. Could you outline for us, Doctor, on the basis of your review of this child's case what factors you considered to be significant in assessing again whether or not digoxin toxication had played any part in his death?

Thank you, Doctor, I understand.

A. This child had multiple congenital anomalies. He was considered a partial Di George Syndrome. I am sure that has been explained to you by Dr. Rowe and Dr. Freedom who have written



on this.

These children often have severe cardiovascular defects which cause their death.

This child had severe congenital heart disease with a single ventricle or common ventricle and was in heart failure. The child arrested on the 28th and died the following - well, died I suppose in the early hours of the 29th this might have been.

THE COMMISSIONER: No, he died at - there seem to be some different views on this.

THE WITNESS: I've got the date of death as the 29th of December.

THE COMMISSIONER: I've got the 28th at 8:16 p.m., but that may be wrong.

THE WITNESS: He died on the 28th?

MS. CRONK: Q. The 28th of December,

sir, at 8:16 p.m.

time I have.

THE COMMISSIONER: Yes, that's the

THE WITNESS: Well, when was the final note written in the chart, can you tell me?

MS. CRONK: Q. Well, to assist

you, Doctor, perhaps, Mr. Registrar, you could provide the medical record of this child for the Doctor.

THE COMMISSIONER: He has it.



MS. CRONK:  $\Omega$ . Do you have it, Doctor, Jesse Belanger? The Progress Notes, Doctor, at page 64.

I'm sorry, Doctor, fairly Miss Kitely points out to me on page 65 of your handwritten notes you have indicated in one place that the date of death was the 29th of December but subsequently later on in your handwritten notes you have indicated it was the 28th.

A. I'm sorry, I made a mistake, it was the 28th.

 $\Omega$ . I'm sorry, Doctor, you were in the course of explaining the factors you considered to be significant.

A. Well, I think the most significant thing within this child's case is that I could not see any order for digitalis for the baby. I suppose I might have missed that but I didn't see it when I reviewed the chart.

Q. The evidence before the Commission, Doctor, suggests fairly that this child was not prescribed, nor was known to have been administered digoxin at the Hospital for Sick Children.

A. And then although the child



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is not supposed to be receiving digoxin I am informed, and I don't know when I received this information, after exhumation that digoxin is found in the liver and in some muscle and it was that, really, that was the major reason for my feeling that this was quite possibly significant, the fact that the child was on digitalis, although the child didn't have any order for digitalis but digitalis was found.

So, at the time that all these cases were considered, my opinion was that one had to entertain a serious possibility that this child had received digitalis and had an overdose, possibly.

Q. Dr. Fay, at the top of page 65 of your handwritten notes on the right hand side again we see a classification with respect to his death.

A. Yes.

Q. Which I take to be yours, is that correct?

A. Yes.

Q. And the classification at that stage is that the involvement of digoxin intoxication was possible and "? unlikely". Do I have that correctly?

A. Yes.



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Q. All right. And then at the meeting of September 13th, Doctor, if you care to look at the minutes at page 227. Do you have that, Doctor?

A. Yes.

Q. Okay. Under the second full paragraph under the discussion concerning Jesse
Belanger attributes the following comments to you:

"Dr. Fay reviewed the chart and stated that an important point was that, although the heart problem was severe, the infant was well enough to leave I.C.U. He said that one would have to be suspicious, but how suspicious is the question."

Did you attribute any significance,

Doctor, to the fact that the child was transferred
out of the ICU prior to his death?

A. I don't really think so. I can't see really how I would have. You mean the fact that the child was well enough to leave the Intensive Care?

Q. Yes, sir.

A. Well, that would indicate to me that the staff of the Intensive Care considered



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the conditions stable at that time, otherwise they wouldn't have moved the baby.

Q. Otherwise he wouldn't have been transferred?

A. Yes.

Q. Doctor, if we continue on to page 228, the next page of the minutes we see that when the vote or consensus was invited with respect to this death your voting became a "Probable Murder". Can you help me, Doctor, as to what information or data became available to you during the course of this meeting that prompted you to change your classification of this death from Possible and Unlikely to "Probable Murder"?

I could have changed my opinion and that is from the round table, if you like, a discussion that went on at the Hospital for Sick Children that morning or afternoon. I don't see very much more recorded here that you could hang your hat on except that the repetition that the baby was fairly stable after surgery and was stable enough to be transferred to the regular floor, wasn't supposed to have been receiving digoxin and had what the toxicologists considered a high level in the liver and I think on



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going over it in that way that's what made me alter my opintion. That is the only explanation I can give you.

- Q. That is the toxicology finding of digoxin in the liver?
- A. I think so. I think mainly that, mainly that, and the fact that the baby had been stable before being transferred to the floor.
- Q. Doctor, were you aware that the liver tissue specimen that was tested at the Centre of Forensic Sciences was an exhumed tissue specimen?
  - A. Yes, I was, I was.
- Q. Did that, Doctor, as a clinician, and perhaps this is not a matter that you can answer, but as a clinician did that cause you any concern in formulating a conclusion as to the possible involvement of digoxin based on the finding from that kind of a tissue specimen?
- who is an expert in the field. I knew that the toxicologists and others had certain reservations about what these post mortem levels meant, but I think that there is no doubt that the consensus at the meeting was that they were significant, that's what I remember and I think that is why I, after



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discussing it with the others present, came to that conclusion.

Q. Doctor, in your view, does the fact that this child was not known to have been prescribed digoxin during life, together with the fact that digoxin was recorded as having been found at the Centre of Forensic Sciences in the exhumed liver tissue from this child suggest that at some stage he did in fact receive digoxin?

A. Yes, I think so. There are other substances I suppose which can be confused but if the toxicologist tells me that that is digoxin and the child isn't supposed to be receiving digoxin then clearly again in the setting which I'm examining this chart I have to be highly suspicious when I put all that information together.

Initially the child presents as an infant with severe congenital heart disease but then at the September 13th meeting on going over everything with the transfer from the Intensive Care and so forth and the finding of digoxin, where the child wasn't supposed to be on digoxin, that was when I made my final decision, came to my final opinion and I did not alter that when some time later I wrote up my final report.



Q. Doctor, at the time that you were formulating your opinion in this case was there any other explanation that presented itself to you that would account for digoxin being found in the liver tissue of this child other than the possibility that he had in fact been administered digoxin?

- A. Not at that time, no.
- Q. Sitting here today, Doctor.

THE COMMISSIONER: Well, we have heard quite a bit about it. I don't know whether you have been privy, have you, to all of this?

THE WITNESS: Well, no, I haven't, really. There is an article in the Annals of Internal Medicine this month on digoxin being found in patients with renal failure who weren't on digoxin at all but the levels reported in the article, and this is in the latest issue of the Annals of Internal Medicine, is in the order of 1 nanogram per millilitre. It is very low.



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So, sure, there are other things that can give, can give a reading of digoxin, but to find it in the child who is not at that level, I can only be guided by what the toxicologist says; and certainly at that time, and that is going back some months I took that to be very significant.

Thank you, Doctor.

Doctor, may we turn then if you would to the case of Stephanie Lombardo. Your handwritten notes with respect to this child begin at page 60.

Doctor, Mr. Lamek properly points something else out to me with respect to the case of Jesse Belanger. Based on your assessment of that child's condition, and your review of the medical record, was there in your view clinical evidence suggestive of renal failure in this child?

- I am sorry to hold you up.
- That is fine, Doctor. 0.
- Which page again is that? A.
- Your notes with respect to Jesse Belanger commences at page 65.
- Thank you. Ah, there may have been some impairment of renal function, the child was in congestive failure, now, I don't know what we have -I haven't got any note of blood, urea or creatinine,



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not that I haven't made a note of any biochemical data to indicate there is renal failure; the child is in congestive heart failure, which does impair the function of the kidneys.

Q. To help you with that, Doctor, Dr. Richard Rowe who, as you know, has given lengthy evidence before the Commission, and my recollection of his evidence, although detailed with respect to this child, did not suggest there was renal failure.

A. No.

Q. My question to you simply is, do you have any recollection of having noted or interpreted anything in the clinical course of this child as being suggestive of that condition at the time of death?

A. No, no.

Q. Doctor, you have indicated as well that apart from the possibility of administration of digoxin to this child during life, another or different explanation to account for digoxin found in the exhumed liver tissue in this child did not present itself to you at the time that you formed your conclusion on the case. Were you able, Doctor, on the basis of the information available to you and your review of this case, to formulate any view as to



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the time or method by which digoxin might have been administered to this child, was that a matter to which you addressed your mind, Doctor, during the course of reviewing this child's case?

The child died shortly after being transferred out of the ICU, as I understand it. The child was stable at the time of transfer. The child is found to have digoxin on examination following the exhumation, and is not supposed to be receiving digoxin. But, you know, I don't think from that data that I am in any position to suggest when such digitalis might have been given. I don't see that I can really make any pertinent or useful comment about that.

Q. And I take it Doctor that at the time that you were formulating your opinion in this case, neither the time at which digoxin might have been administered, nor the method or methods whereby it might have been administered were matters to which your attention was drawn?

A. Well, my attention wasn't drawn to it. It would be impossible for me not to give some thought to that, if my cerebral cortices were working I would have to have thought along those lines; and I suppose, and this is conjecture too and perhaps the



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Commissioner doesn't want to hear it, I suppose I thought and it might have passed through my mind that the child might have had it in the few hours before the child died, but I can't remember. If you gave it to me now in the context in which we are discussing this I would probably think that way, or possibly.

Q. Doctor, fairly, I am not interested in eliciting an opinion from you that you feel is outside the area of your particular expertise, but as a clinician ---

interested in knowing his views now than his views then on that question. So you were asking about his views then, I would have thought they were, even if he had no expertise whatsoever, they would be less valuable, unless of course you are going down hill mentally, and I am sure you are not.

MS. CRONK: I didn't say that, Dr. Fay.

Q. Doctor, as the Commissioner

fairly points out ---

THE COMMISSIONER: I trust you haven't reached that stage yet.

MS. CRONK: Q. As the Commissioner fairly points out on my question to you was that as a clinician --



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A. Yes.

Q. -- are you able to formulate any view as to the likely method and amount of digoxin that might have been administered to this child, so as to account for the levels which you know to have been found in these exhumed tissues?

A. I cannot pass an opinion on those levels. I do not have the expertise of a toxicologist. I gathered from the toxicologist who was associated with this, Mr. Cimbura, that he was at some disadvantage that he did not have any data. I don't know whether he found any eventually or what he has got now, but at the time he was uncertain as to the significance of many of these figures that are quoted. I think the real significance is that I am told by a professional, I am told by a toxicologist of some repute that here he finds digoxin. I am taking it that this is truly digoxin, and that the significant thing to me is that the child was not supposed to be on digoxin.

Now, about what passed through my mind, or what passes through my mind now, I don't think that that is particularly valuable for me to comment on, because it would be sheer conjecture, but the child had digoxin some time as far as I am concerned from what I know.



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Q. Doctor, I understand that and my dilemma perhaps is this: if you were led on the basis of your knowledge of this case --

A. Yes.

Q -- to the conclusion that the child at some time had had digoxin, did it not necessarily flow from that that in order for you to conclude that it was probable murder you had to formulate an opinion as to the amount and the method whereby that digoxin might have been administered?

A. Well, I suppose it would be most likely in the way you are putting your question, it would be most likely then that the child had had digoxin administered intravenously in a fairly substantial amount after transfer, or about the time of transfer from the Intensive Care Unit I suppose.

Q. Doctor, without formulating an opinion as to whether or not the digoxin was administered in a particular amount, be it a therapeutic amount, for example, or an amount greater than that, is it possible under the circumstances for you to formulate a conclusion that this child was probably murdered?

A. I really find that at this time - the Commissioner says what am I thinking to day, I find





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it difficult to say that; but the child had digoxin, the child was not supposed to be receiving digoxin. Looking at it as I was looking at it at that time in discussing it at the time we discussed it I think that the conclusion that was reached was not unreasonable.

Q. Doctor, I pass no judgment on that and perhaps I will leave the matter there. May we turn now to the case of Stephanie Lombardo, and your handwritten notes as I suggested a moment ago start at page 60 with respect to this child.

Doctor, once again based on your review of this case and the notes and case review which you prepared, can you help us as to what factors you consider to be significant in assessing whether or not digoxin intoxication had contributed to this child's death?

A. The child was 10 days of age,
9 days of age at the time of death, had well recognized
congenital heart disease, tetralogy of Fallot and had
a shunting operation performed, which as you know is
designed to increase the flow of blood to the lungs.
Initially at least the child was said to be on no
medication apart from Heparin. I did not see any
orders for digoxin. Then at 3:30 a.m. I think that





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was on the 22nd, the baby has an irregular heart rhythm, gets a slow heart rate; on the 22nd the electrocardiogram monitor shows varying rhythm, slow to fast, and varying QRS patterns and the baby has a rhythm disturbance, the child vomits, which is common enough in sick children, it is common enough in healthy children and we have talked about the possibility of that being a manifestation of digitalis toxicity and then goes into ventricular fibrillation, attempted -- goes into asystole, that is the heart stands still. So it is thought that the death is somewhat unexpected, and then we learn that the child was not supposed to be receiving digoxin. I have no note that the child received digoxin from my perusal of the medical records. Then again Mr. Cimbura presumably, I don't know where else we would have got any figures like this, he gives us figures of 487, 687 for digoxin in the myocardium. I think that therefore when we discussed it, put the child into the probable category and that is the way I put it in my final report.

Q. Doctor, was it your view in this case that the death of Stephanie Lombardo was somewhat unexpected?

A. No, I have to say that is



somewhat difficult. This is a baby of nine days, the child has severe congenital heart disease needing surgery within the first nine days of life. This is a very fragile situation. I really think that is overstating the case, if I can use that, I really think it is overstating the case. I think that if you have a nine day old baby who was operated on for severe congenital heart disease and the baby dies within a short time of the surgery and you were to say that is totally unexpected, that really isn't very sensible to me looking at it now, I don't think I could say that.

Q. Was there anything, Doctor, about the timing of this child's death and the terminal events which she suffered at the time when she did die that caused you concern when you reviewed this medical record?

A. Well, certainly there again there is the arrhythmia, that doesn't mean to say that is necessarily due to digitalis, but there is arrhythmia, brady/tachy arrythmia going to ventricular fibrillation and that can be a manifestation undoubtedly of digitalis toxicity. I suppose once again the information I had was that this child had not been ordered digoxin, I didn't see or make a note of any digoxin being ordered when I reviewed the chart.



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I didn't see or make a note of any digoxin being ordered when I reviewed the chart, and then we get the figures on the myocardium, and I have a note here which says high. I don't know - that may have been - that should have been a bit of a question mark rather than anything else, but these are clearly received from Mr. Cimbura and therefore they weigh heavily in my final assessment of this child as to the cause of death.

Q. Doctor, I am not sure that I fully understood your answer.

Leaving aside the toxicology data that was ultimately provided to you ---

A. Yes.

Q. -- is there anything in the clinical record of this child concerning the timing of her death or her terminal events which caused you concern when you were assessing whether or not digoxin had played a part in this child's death?

A. No. Clearly there was a possibility. That is all one can say. The thing which finally swayed my opinion I feel certain must be the toxicology.

Q. Doctor, with respect to the toxicology data I note on the second page of your handwritten notes there is a reference to a post



mortem blood sample with 225 nanograms per millilitre?

A. Yes.

Q. Doctor, I tell you that I am unaware of any post mortem blood specimen on this child with a digoxin level at all.

Can you help me as to the source of your information that a post mortem blood sample resulted in a digoxin level of 225 nanograms on this child?

A. Well, I believe that on looking into that I believe that was chest fluid in fact and not blood, pleural fluid.

Q. Fairly, Doctor, the various reports by the Centre for Forensic Science indicate that a specimen of exhumed - excuse me, I'm sorry, a specimen of chest fluid in fact resulted in a digoxin level of 225 nanograms.

Do you have, apart from your recollection with respect to the chest fluids, any recollection of having been informed at any stage that there was a post mortem digoxin level from a blood sample obtained in this case?

A. Oh, no. It is clear. From what you say that is clearly a mistake on my part.

Q. Thank you.



Doctor, dealing with the categorization which you made in respect to this death in your handwritten notes at the top of page 60 the word "possible" appears, and I take it that based on your initial review of the medical record and the information then available to you without more, that is the way in which you categorized this child?

- A. Right.
- Q. Doctor, then when we come to the September 13th meeting, the discussion with respect to Stephanie Lombardo commences at page 225 of the minutes.

Do you have that, Doctor?

- A. 225?
- Q. 225.
- A. Yes.
- Q. Doctor, again . the second full paragraph reported in the discussion as to Stephanie Lombardo has to do with remarks attributed to you; you were indicated as having said:

"Dr. Fay reviewed charts and agreed that death was somewhat unexpected. He stated that digoxin overdose is a possibility, but the question is



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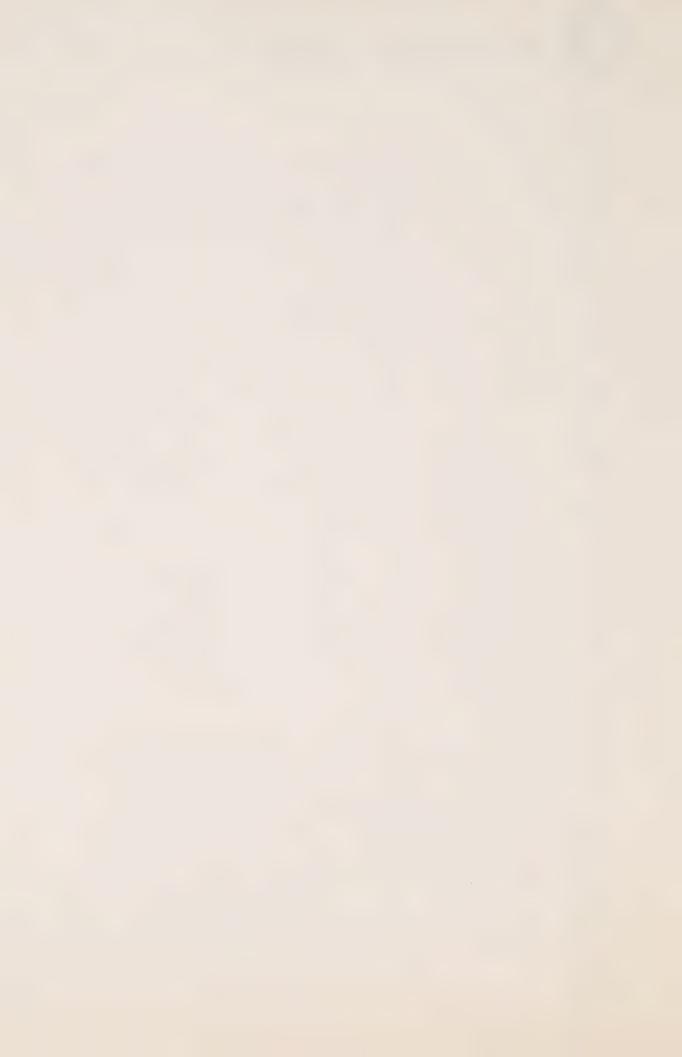
"how strong? He raised the points that the baby was seven days post operative and appeared to be doing well. One would have to be suspicious, but he stated it would be hard to put it to probable murder. Dr. Fay stated that things that raise concern were already pointed out. The baby was only 10 days old, had serious heart disease, and these babies do die in these circumstances. However, Dr. Fay stated he would be suspicious."

A. Yes.

0. Doctor, as appears from the later entries in the minutes when it came time for the vote and the consensus to be invited with respect to this child your vote was that of probable murder.

Once again, Doctor, can you help me as to what information or data was made available to you during the course of this meeting which led you to alter your initial opinion and to recategorize this death into the probable category?

That is quite correct. It had A. only to do with further discussion. I think probably



some further toxicology that was brought out by
Mr. Cimbura. I am not sure. As I say, I have never
had any report on toxicology and a final consensus
on whether this was probable or whether it was
just possible. And there I presume after further
discussion of the toxicology we decided it was
to be in the probable category.

Q. Doctor, I take it you have no specific recollection as to when you were first informed as to the toxicology results of this child; is that correct?

A. Well, if they weren't in the chart when I reviewed them, and I don't think for one moment they were - I don't think they were there - they were not there, they were not in the chart - perhaps some of these were in the police record that I have referred to that was with the chart in the envelope. I am not sure, but certainly there was no full discussion really of the toxicology for the group. There were isolated comments at meetings we attended. No group discussion on toxicology until the meeting of September 13th.

Q. Do I have it correctly,

Doctor, that it is as well possible that you were

provided with this toxicology data for the first



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time at the meeting on September 13th, or do you recall?

A. I suspect strongly that some of it at least was supplied - that I saw for the first time, I think that is correct, on the 13th. I can't be certain but I think that is correct.

Q. Doctor, if some of the toxicology results had been made available to you prior to the September 13th meeting, I take it your initial conclusion that there was only a possibility of digoxin involvement in this case was a conclusion you reached knowing what the initial toxicology results had been.

Do I have that correctly?

- A. Can I just have that repeated?
- Q. Sorry, Doctor. If the

toxicology data in part had been provided to you prior to September 13th, that was information that you were already familiar with when you reached your initial conclusion that there was only a possibility of digoxin intoxication in this case. Is that correct?

A. Yes, that is right. If in fact I possessed it, but I don't have - I have notes on the myocardium but I don't have the other data.



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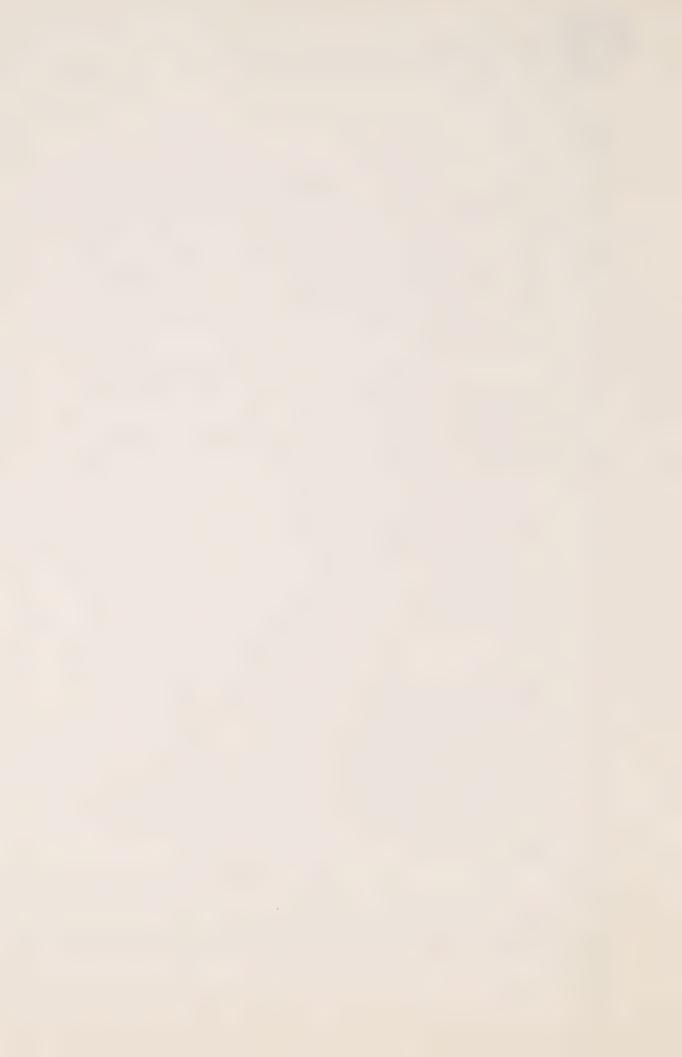
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Doctor, with respect again to 0. the conclusion in this case that this child should be put into the probable category, did you in this case pay particular regard to any of the opinions that were being expressed at this meeting as best you can recall?

I certainly paid regard to Dr. Hastreiter's opinion which was the first time I had really heard all these cases discussed and commented on by Dr. Hastreiter. This was the first time - the first and only time in fact - and after that I gave my opinion and I listened to the rest of the comments which were I think somewhat shorter on the whole than the medical comments probably. And then we gave a final opinion.

That final opinion I noted down and when I made my final report I didn't alter it because I didn't give any further consideration at that time. I thought it would be improper in fact as I had understood the process, and the purpose of that meeting, I had given an opinion and I didn't alter it at all.

Doctor, having regard to the fact that Stephanie Lombardo was not known as you yourself noted on a review of her medical record to



have received or been prescribed digoxin while hospitalized at the Hospital for Sick Children and yet the toxicology data presented by Mr. Cimbura indicated that digoxin was in fact found in certain of her exhumed tissues, is it reasonable in your view to infer that this child in fact did receive digoxin at some point during her life?

A. I would have to presume that to be the case, and if we are being misled by something that is - which is assaying as digoxin then I don't know what it is and I haven't been told what it is, and Mr. Cimbura hasn't told me that he has changed his opinion and I don't know of any other research that has been done to suggest that he should change his opinion. That is all I can say.

Q. Does the fact, Doctor, that there would appear not to have been any post mortem blood specimen which resulted in a digoxin level in this case affect in any way the conclusions that you drew with respect to this child's case?

A. We drew a conclusion which
we presumed was correct that here was a child that
was showing digoxin in the tissues who wasn't supposed



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to have had digoxin.

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If that was a wrong conclusion I haven't yet been told why it is wrong and where we went wrong, and I haven't had any further information and I haven't researched the subject and I am really not in a position and I am not - I haven't the expertise to research it from the toxicological point of view so I would have to draw the same conclusion today.

0. Doctor, perhaps my question was unclear.

It appears that at the time you prepared your typewritten case review ---

> Yes. Α.

-- you were under the impression that a post mortem blood level of 225 nanograms per millilitre had been obtained in this case. You have told us that in looking into the matter further it seems to you that that level that in fact was 225 was chest fluid.

If you were under the impression at the time of making your opinion, Doctor, that there was a post mortem blood serum specimen with a level of 225 nanograms, does the fact that it now appears that there was no post mortem blood level cause you



in any way to alter or reconsider the conclusion that you originally reached?

A. No, it doesn't really cause me to alter my conclusion. I don't really know what this chest fluid level of 225 nanograms per millilitre means.

You know, I don't know whether this is chest fluid. It doesn't say whether it is bloody fluid or clear fluid or transudate or exudate or what is is, and it doesn't say, you know, anything about the fluid. It is just fluid in the chest. It is not blood.

I don't know what 225 nanograms

per millilitre means in those circumstances in

terms of the toxicology. It certainly sounds high,

but the important thing is again that here is another

estimate of digoxin in a child who is not supposed

to be on digoxin, and it is in addition to another

tissue, the myocardium, which also shows what

appears to be or was told or suggested to be a high

level, so here are two tissues, fluid and tissue,

which show digoxin.

I can't say that that is significant by any means. I can't say that that 225 nanograms per millilitre in chest fluid is as significant as



a blood sample taken immediately post mortem. Certainly not. I wouldn't be prepared to say that, but it shows digoxin just as the myocardium does in a child who was supposed to be receiving no digoxin. So that in the last analysis, no, I don't think it does make me alter my opinion.

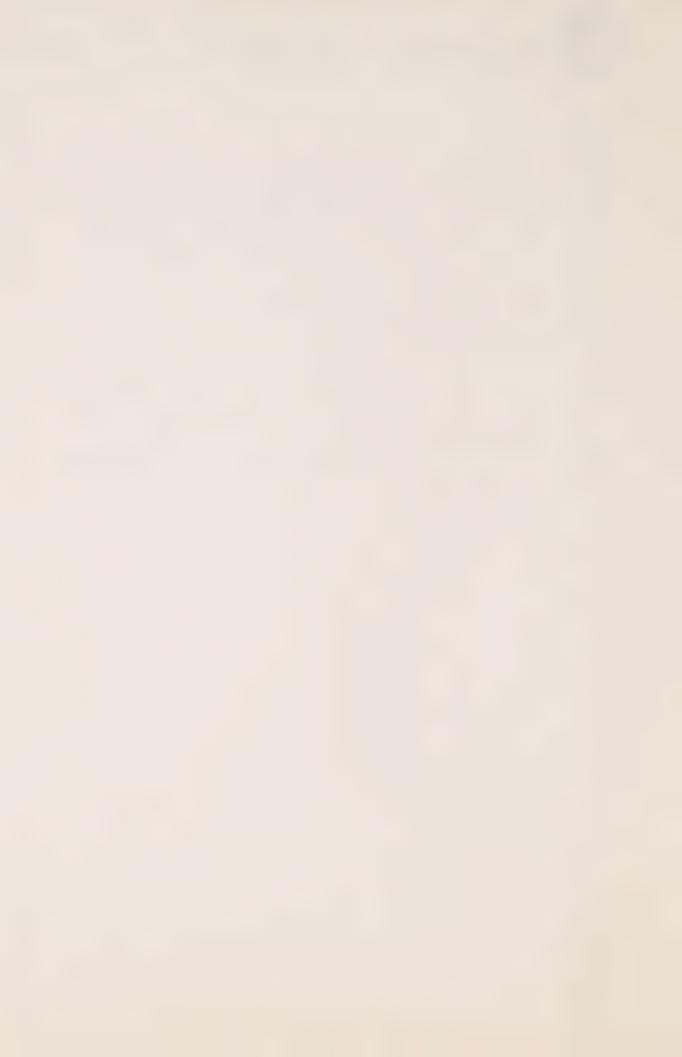
MS. CRONK: Thank you, Doctor.

Mr. Commissioner, I lost track of the time. Shall we take a break at this time?

THE COMMISSIONER: Yes. 15 minutes.

--- Short Recess.

TORONTO, ONTARIO



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---Upon resuming.

THE COMMISSIONER: Yes, Miss Cronk.

MS. CRONK: Thank you, sir.

Q. Doctor, may we turn now to the case of Jordan Hines. Your handwritten notes with respect to this child commences at page 83.

Once again, Doctor, I would ask you to outline in brief for us if you would the factors which you consider to be significant in reviewing this case to assess the possible involvement of digoxin intoxication?

and a half weeks of age and was a very sick child,
was septic, was thought to have sick sinus syndrome,
which I am sure Dr. Rowe has talked bout. The pacemaker was thought to be normal. He developed apneic
spells, suspended respiration, got a slow heart
rhythm and arrested. Now, at autopsy the heart was
normal except for some changes which were thought to
be due to anoxia or lack of oxygen, which could
have been just terminal when associated with a cardiac
arrest. But the child did develop an arrhythmia
with a tachycardic, junctional rhythm going into an
asystole, which is just a heart that doesn't beat at
all.



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The pathologist I believe raised the question of SIDS or Sudden Infant Death Syndrome and I believe that there had been a question of this child having an episode prior to the final episode. I don't know now without referring to the autopsy report whether there was a preponderence of findings which pathologists have described in the Sudden Infant Death Syndrome. I don't know a great deal about this but the abnormalities which are described are also found to some extent, a lot of them anyway, in children who aren't victims of Sudden Infant Death Syndrome.

Now, I didn't see that there had been any digoxin ordered for this baby. As far as I am aware, this baby was not on digoxin. The baby died with an arrhythmia. The child was said to have a sick sinus syndrome which can occur in infants. So, that could be the explanation but arrhythmias may occur in SIDS too, for whatever reason. But there was no digoxin ordered for this child and, I don't know, I can't read my figures here, but I understand the post mortem digoxin was found, I believe it was 252 nanograms per gram in the heart, I think that's right, and 56 nanograms per gram in skeletal muscle and then there is something chopped off at the bottom



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of the page.

So, I didn't see any digoxin ordered. The child died of an arrhythmia and digoxin was found post mortem.

So that although the child had a sick sinus syndrome and although the question of Sudden Infant Death Syndrome was raised at autopsy, after the autopsy findings, then I think that one has to be quite suspicious in this situation that the infant may have died with a toxic digitalis arrhythmia.

Q. Doctor, you have said a few moments ago that you did not know, I believe your words were you did not know a great deal about this. I take it you were referring in that context to Sudden Infant Death Syndrome?

- A. Yes.
- Q. Did I understand that correctly?
- A. Yes.
- Q. You have also suggested, Doctor, that it is possible to have arrhythmias in cases of SIDS. Have you had experience during the course of your career, Doctor, with infants whose deaths have been attributed to Sudden Infant Death Syndrome?
  - A. Have I had?
  - Q. Yes, Doctor.



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Not really, I don't really see them. They don't present to me as a child with arrhythmia and then they die suddenly. I mean, that is not the way SIDS presents, it's not that sort of story at all. There seem to be a whole series of things that may occur in these children. I mean, some of them may have respiratory arrests, some of them may die of cardiac arrhythmias. I think that as far as the autopsy findings in SIDS goes that a lot of things have been commented on; in the pulmonary arteries, in the brain stem, in the brain, even muscle tones and things like this. But you know, there is nothing terribly hard and fast. There is a lot of data but there is nothing terribly hard and fast so that you can look at the child and say that child is in danger unless they have had a near miss or unless you find some of these findings on clinical examination of hypertonia in the muscles and so forth. But it isn't really an area where I have expertise. I wouldn't like to pose as knowing very much about SIDS at all, really, because I don't encounter it and I don't deal with it and it doesn't present to me at any cardiac clinic, you know, that your child has had a Sudden Infant Death near miss, it wouldn't come to me.



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O. Thank you, Doctor. Doctor, was it your understanding in this case, in the case of Jordan Hines, that the involved pathologist who had conducted the autopsy on the child had concluded that there were pathological findings indicative of Sudden Infant Death Syndrome?

Yes, yes, I heard that, I knew that that was the case. Again, I would have to accept the opinion of an experienced pathologist in this area. The thing I note when I read about the pathology of Sudden Infant Death, which isn't something that I am doing all the time, that there seems to be an overlap. So that I presume you really need a preponderence of things in order post mortem to say, you know, I think there are changes in fatty tissue, changes in the pulmonary arteries, changes in the central nervous system and so forth. A lot of these are found in normal children. There seems to be a preponderence in Sudden Infant Death Syndrome and I suppose when you add them all up that pathologically you can say, yes, this fits, the child has died suddenly and here it is, we've got findings that would fit with that and that is the anatomic marker of Sudden Infant Death.

But really, I am not the person to be



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|------|--------|--------|-----|-------|-----|-----|------|----------|-----|-------|
| far  | more   | about  | it  | than  | Ι   | do. |      |          |     |       |

Q. Doctor, with respect to Jordan Hines, based on your handwritten notes, once again, there is a classification or categorization of this case which appears at the top of page 83 which reads Possible, and I take it that on the basis of your initial chart review and in assessing the information then available to you you concluded that there was a possibility that digoxin toxicity may have played a part in this child's death.

A. Yes.

Q. All right. In arriving at that initial conclusion, Doctor, did you place any significance on the fact that no digoxin had apparently been ordered for the child?

A. Yes, yes, yes I did. Yes, yes, I'm sure I did.

Q. Do you recall, Doctor, in this specific case when the toxicology data was made available to you?

A. You know, I think from that note I must have picked that out from the file, from the envelope I referred to in the big container that the chart was in, that there was this other



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envelope and I probably at the time, after I had reviewed the chart, got that envelope out and had a look at it.

Q. Do I take it then, Doctor, that your initial classification as to the possible involvement of digoxin intoxication was based purely on the chart review without reference at that point to the toxicology data?

A. I think that's possible. think it is highly possible that I wrote that because I didn't look at anything in the police file, or whatever you want to call that, until I had finished my chart review.

Doctor, could I ask you to turn if you would to the minutes of the September 13th meeting. The discussion with respect to Jordan Hines commences on page 220, the bottom of the page. In this case, Doctor, Dr. Hastreiter is recorded as having indicated that he would classify the case as a good prospect of massive overdose. Following over to the next page you are recorded as having stated that you more or less reached the same conclusion as Dr. Hastreiter and as having said that you were concerned that:

"...here is a child being identified



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"as heart disease who was not that sick."

And you put the death in Dr. Hastreiter's

"Good" category or A category if you will.

Doctor, can you help me, having regard to the fact that your initial classification of this case was not to put the child into the Probable category or the highest category of suspicion but only the Possible category, what information or data motivated you at the meeting of September 13th to elevate this child's classification to the Probable or the highest category of suspicion?

normal. I'm not certain now, as the child was quite young, on what evidence the diagnosis of sick sinus syndrome was made maybe because the baby had an arrhythmia very early on. I'm not sure on what basis that was made. The child's heart was normal clinically, there was no anatomic abnormality defined or found I think once again probably because no digoxin had been ordered that I could see in the chart. I suppose on the basis of no structure abnormality in the heart. I'm not sure on what the sick sinus syndrome was based and the finding of digitalis post mortem in a baby that hadn't had any ordered.



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A. Yes.

Q. The first was that there was no structural abnormality to the heart of Jordan Hines. Do I have that correctly?

A. Yes.

Q. All right. And the second was the actual toxicology findings with respect to the various tissue samples which were assayed at the Centre of Forensic Sciences?

A. Yes.

Q. And then thirdly, Doctor, I am left in some confusion. You suggested that you were uncertain as to the basis upon which the diagnosis of sick sinus syndrome had been put forward. Was it your view on the basis of your own review of this medical record that that was an appropriate diagnosis for Jordan Hines?

A. I think it might have been.

Sick sinus syndrome can occur in infants. It has
been well recorded and reported. Again, I think
that there was no order for digitalis and the baby



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is shown post mortem to have digitalis. So, certainly, one has to consider the possibility in this setting that the child with an arrhythmia as a total event may have been exhibiting symptoms of digitalis toxicity.

Q. Doctor, in the minutes of the September 13th meeting it is suggested as well that you expressed the view that Jordan Hines was identified as having heart disease but he was not, in the language of the minutes, that sick. Could you explain for us, Doctor, what you meant by that comment if indeed you made it at the meeting of September 13th?

A. Well, if I made it I don't know why I made it, really, the baby doesn't sound to be that well either, so, I can't have it all ways. I've got left lower node pneumonia, the baby has congestion and edema, the lungs -- of course, that could have been a terminal event -- petechial hemorrhages, in the white matter of the brain, again, that could have been a terminal event.



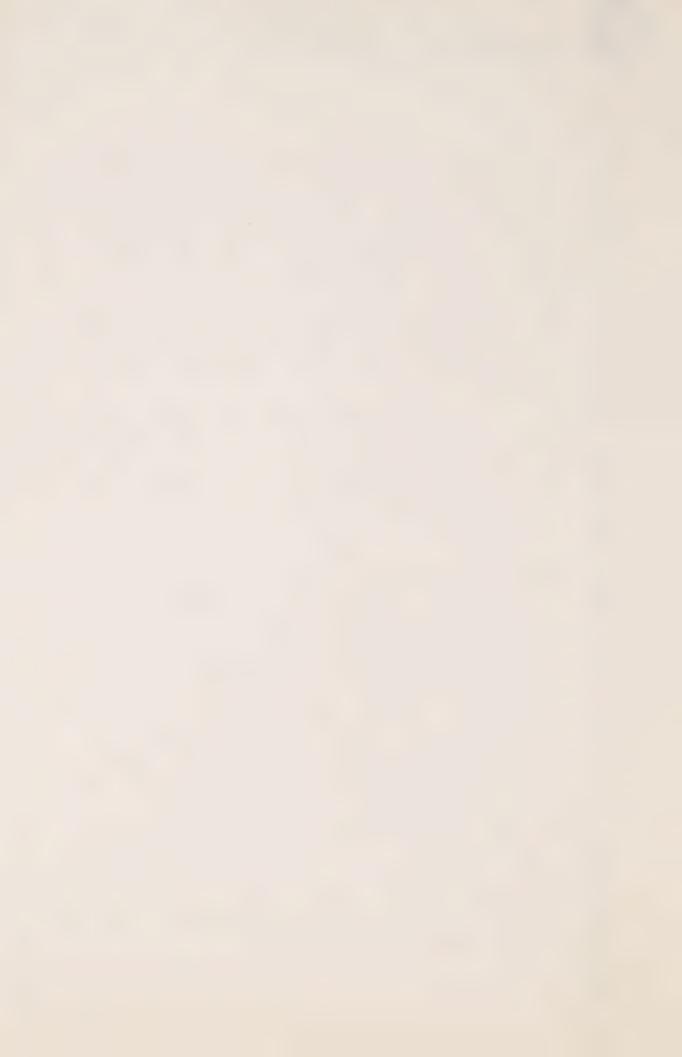


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I have got here a note of clinical sepsis, so that it was thought at one stage the child was septic, and there was a question of a left lower lobe pneumonia; I really find it difficult to analyze just exactly why I made that comment at the time I did on the morning I did, on the 13th of September, because the baby doesn't sound that well to me when I read my notes now.

Q. Was it your view, Doctor, based on your review of the medical records that Jordan Hines was in a relatively stable condition immediately prior to the onset of his terminal events?

Mean that is different from saying he was reasonably well. He might have been sick and stable too, that is not inconsistent or infallible. It doesn't sound - I really can't say reading my notes here that this sounds like a healthy infant from what I am reading. So I think I have to ask for your consideration at the time, may have been - I am not really expressing a very good opinion at that time. But nevertheless the important thing to me in the final analysis is this finding of digoxin in the child who has not had any digoxin ordered, there is none in the chart ordered, and therefore, again, once again I come back to the toxicology.



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Q. Were you aware, Doctor, at the time of the discussion on September 13th, that the specimens which had been tested from the body of Jordan Hines for digoxin were of two varieties. The first were a series of fixed tissue specimens, and by that I mean preserved in a preservative solution; and secondly, there was as well a group of exhumed tissue. Did you know at the time of these discussions the nature of the specimens that were involved?

A. Yes, I think I knew, but there was really no way that I could express any worthwhile opinion on the value of fixed tissue estimations as opposed to exhumed tissue estimations, and I was being guided entirely by what the experts said about it

Q. In this case, Doctor, Mr. Cimbura is recorded in the Minutes as having indicated that the concentrations of digoxin in the myocardium of Jordan Hines were likely inconclusive; that the exhumed liver concentration of 240 nanograms was somewhat higher than the normal therapeutic range of liver tissue; the muscle was in the normal range if compared with normal therapeutic levels. Then Mr. Cimbura, it is recorded, said, as far as the toxicology alone was concerned the numbers by themselves were inconclusive, however, the findings were significant







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from the point of view that digoxin was found.

In those circumstances, Dr. Fay, did you have any reservations in categorizing this death as being in the probable, or good category, for involvement of digoxin intoxication?

Well, Mr. Cimbura as I recall it was quite often a little reticent about committing himself on some of these levels and he is so here. I think the last analysis would be the discussion that took place on this baby, that the thing really hinged more on the finding of digitalis in a child who apparently had not been ordered any digitalis, and we took it that we were looking at digitalis, or digoxin.

Doctor, in the index cards which you completed with respect to each of these children, there was as well a card completed for Jordan Hines; and on your index card there is first a rating of a B, which is then crossed out and the rating of an A, or the highest category substituted. I confess I had some difficulty in knowing in those circumstances what your categorization of this death in fact was.

Doctor, at the conclusion of the September 13th meeting, did you have any doubt as to the likelihood of involvement of digoxin intoxication in this case?





A. Oh yes, I am sure I had doubts, I can assure you I had doubts.

THE COMMISSIONER: We are having all kinds of trouble with the semantics. Did you have any doubt as to the likelihood; and I didn't know how you were going to answer that, that is a double negative of some kind.

THE WITNESS: Yes.

doubts as to the likelihood, that is you apparently came out with an "A" rating. Really what we are asking, did you still at the conclusion consider it to be likely, at least I think that is what you are asking, is it? Do you still consider it to be likely, is that what the question is, or do you have any doubts as to digoxin causing his death, which is a vastly different question?

MS. CRONK: Perhaps I can put it differently, Mr. Commissioner.

THE WITNESS: I can answer that question, I considered it likely.

THE COMMISSIONER: You considered it still likely?

THE WITNESS: Yes.

THE COMMISSIONER: I am going to ask



you the next question, did you have any doubts as to whether digoxin caused his death?

THE WITNESS: Oh yes, I had some doubts, yes, sure, and you know this categorization, if I can say something, there is a little bit of a discussion before we got going on the September 13th meeting, you know, it wasn't crystal clear just how we could see these, good, fair, small, possible, probable, improbable, A, B, C and D, you know, to get this all meshed in together, as you see, good for Hastreiter means A and B, so the fact I crossed out B and put A really doesn't make any difference according to Hastreiter's classification.

MS. CRONK: Q. Doctor, could I ask you to turn to your typewritten version of your case review if you would?

A. Yes.

Q. That is at page 82, your expressed conclusion with respect to this case reads as follows:

"Post mortem digoxin was found in the heart skeletal muscle and liver and certainly in this case digoxin toxicity is a good possibility as the cause of the terminal event."

That language of course differs, Doctor,





from that that we have seen, for example, in the case of Kevin Pacsai, Justin Cook, Allana Miller and the others that we have reviewed today. Does the difference in language indicate a lesser level of confidence on your part as to the involvement of digoxin intoxication in this case than in the others that we have discussed today?

A. I think that is exactly the case.

Doctor, can you help me on the basis of your original classification of this death, which we have seen from your handwritten notes was possible; you have told us that you knew on the basis of your review of the medical record that this child was not prescribed digoxin; do I have that correctly?

A. Yes.

Q. You knew as well on the basis of your review of the medical record that his heart had been found to be anatomically normal at autopsy?

A. Yes.

Q. And if I understood you, Doctor, you suggested as well that at the time that you completed that review and before going to the September 13th meeting, you had been informed of some of the toxicological data that was available in this case?



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Q. Doctor, in those circumstances, when you reached the conclusion that the proper categorization was only possible, knowing those three factors, why then at the meeting of September 13th were you motivated to alter that opinion and to elevate this case into the "Probable" category?

A. That is an excellent question, and you know if you ask me ---

Q. It is late in the day, but I am trying, Doctor.

A. If you asked me to go through all of these cases this afternoon, to go through all these cases again I might, you know, just alter slightly something I have said.

I was given charts, that is all I was given, I was given nothing else at all but charts to look at and I was given toxicology. On the basis of that I had to try and make and form an opinion. That I did, and then I went to one meeting and only one meeting did I go to where everybody was assembled and this whole thing was opened up and discussed to get the consensus, and I gave my best opinion at that time. I think it is terribly difficult to be certain and I think in the last analysis what I have relied on





and what I had to rely on, and what I had absolutely no choice but to rely on was the toxicology, okay, coming through, the toxicology in the setting that I had been asked to look at these charts. Did this child die as a result of digitalis toxicity, that is what I was asked and that is what I tried to do.

I am not going to say in every instance,
Mr. Commissioner, that I hold hard and fast to every
single thing, because it is very, very difficult and
one can only give an opinion and as one reads it again
a year later one may have a slightly different opinion.
I don't think there is anything inconsistent really
in some of those remarks that I have made. I
appreciate your questions have been very clear, and I
thank you for that. I wish my answers had always been
as crystal clear, but I can't do better than I have
done because I have tried to do it as honestly as I can
and tell you how it evolved. It wasn't terribly
satisfactory from my point of view.

Q. I thank you, Doctor, and I think
I understand the situation you have just described.

My concern perhaps is best stated this way.



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Q. It is clear from what you have told us that at the time you were reaching your initial conclusion with respect to Jordan Hines you had available to you some of the toxicology data?

A. Yes, I did.

Q. Indicating findings of digoxin in the tissues of this child, although he had not been prescribed digoxin, do I have that correctly?

A. That is correct.

Q. And it was in the light of that information, Doctor, that you reached your initial conclusion that there was only a possibility of the involvement of digoxin intoxication?

A. That is right.

Q. And then Doctor when we come to the meeting of September 13th, you are recorded at the end of that discussion as having voted to put this, as having said that this was in the probable category and you are recorded as having said:

"He put this death in his category A from a review of charts prior to



"this discussion."

My question to you, Doctor, is simply this. When you went into the meeting of September 13th, as best as you can now recall it, was it then your view that there was only a possibility that the death of this child was affected by digoxin toxicity?

A. No, I don't know how that can be said, because when I went into that meeting I had this note which is before you. Now, you know even allowing for some mental aberration taking place, how can I sit there with that that I have written before me and make such a statement, I must have had a lapse of mind if I said that.

Q. Right.

A. I would really, with all due respect question that part of the statement.

moved, if you will turn from page 83 to page 82 you have moved and it is hard to tell what took place, you have started off with "possible" at page 83.

THE WITNESS: Yes.

THE COMMISSIONER: That is not what you say at the bottom of page 82. You have in this



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"... certainly in this case digoxin toxicity is a good possibility as the cause of the terminal event."

I am not too sure what that means, but it means something more than just possible.

THE WITNESS: But that --

THE COMMISSIONER: So you have got to --

THE WITNESS: I moved, yes, but I

moved, Mr. Commissioner, after the September 13th meeting.

THE COMMISSIONER: Is this written,

I'm sorry I missed that.

THE WITNESS: Yes.

THE COMMISSIONER: Was this written

after ---

THE WITNESS: After the 13th I dictated my notes. As I told you before, as I believe I said before I did not alter my position after that meeting for consensus. I didn't review anything, I didn't consider it again, so I kept to the same opinion, but that opinion is the September 13th opinion and I haven't moved. If I have said what is reported that I have said I don't know how I can be sitting there with this in front of me.



Q. I take it then, Doctor, that

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the comment that is recorded to have been made by
you in your view is inaccurate?

A. I would say less than accurate

A. I would say less than accurate as far as I recall it and as far as I can put it together now I would have to say that. I am not criticizing the person who had the awful job of taking minutes at that meeting, but I would have to question it.

THE COMMISSIONER: What is the date of that letter, I am sorry, did we make that an exhibit?

MS. CRONK: Which letter, sir?

THE COMMISSIONER: It is the letter

THE WITNESS: January, Mr. Commissioner.

MR. YOUNG: January the 26th, 1983.

pardon, yes, yes. Now Doctor, just let me make a suggestion to you and see if it is possible, probable, likely or unlikely, You see you have written at the top of page 83: "possible".

THE WITNESS: Yes.

THE COMMISSIONER: You see you have put under that: "No digoxin ordered", and at the bottom



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you have crammed right in the very bottom, now this may be a copying problem you have got, the digoxin levels have been given to you. Is it possible that after you wrote the word "possible" you got the information as to the digoxin levels and the information that no digoxin was ordered, and that is what made you change your mind?

Commissioner, that is all I can say, it is possible.

I really can't remember at this distance in time.

THE WITNESS: It is possible, Mr.

MS. CRONK: Q. Doctor, I take it from the entries contained in your handwritten notes in this case, and specifically reference to some of the anatomic findings, at autopsy, that you had as part of your review of the medical record reviewed as well the preliminary autopsy report on Jordan Hines which is contained in his medical record; do you recall having done that Doctor?



Well, to assist you, doctor ...

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|   |      |         | Α.   | . Oh,   | yes.    | Yes, | I bel | Lieve | so  |
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| Ι | went | through | many | autopsy | reports | in   | these | chart | ts. |

Mr. Registrar, could you show the doctor, if you would, please, Exhibit 103, the medical record of Jordan Hines.

Doctor, I would ask you to turn if you would to page 79, which is the preliminary autopsy report of this child.

Doctor, it has been suggested by certain witnesses before this Commission that Sudden Infant Death Syndrome may properly be regarded as diagnosis by exclusion. Is that a view with which you would agree?

A. Yes, I would think that is quite correct from what I understand about it.

Ω. Doctor, the basis of your review both of the medical record in its entirety and the preliminary autopsy report, were you able to form an opinion as to whether or not Sudden Infant Death Syndrome explains the death of this child?

A. I have said that there is a possibility that this child died of digitalis intoxication. I don't think one possibility excludes another possibility.

The findings at autopsy as I under-



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stand them are consistent in many areas with Sudden Infant Death Syndrome.

I must point out again, if you will excuse me, that I was looking at these charts from a specific point of view, and that was is there a possibility or probability or do you think no likelihood of this child having received a toxic dose of digitalis. So, if you ask me to choose, I have just said it is possible, and I say that this also is possible, but I can't rule out the possibility of digitalis intoxication having been instrumental in this child's death, having been the cause of this child's death.

In other words, I am not certain and I don't know.

MR. ROLAND: Well, I don't want to slow you down too much, but I think it is just slightly unfair to the doctor to put before him the autopsy report. We know from Dr. Becker what the autopsy report is intended by him to say, which reads somewhat differently.

You will recall Miss Cronk took

Dr. Becker through the conclusions others had drawn

from the autopsy report; I think Dr. Rowe and Dr.

Rose and others, and they all misunderstood the



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autopsy report.

Dr. Becker made it clear to us in his evidence that there is no doubt in his mind that the baby died from a pathology point of view from SIDS, and he explained that in great detail when Miss Cronk took him through that.

So, when you put the autopsy report to this witness, you really have to put it in the context of what the author meant.

THE COMMISSIONER: Well, I thought Miss Cronk did put that to him. I thought she did put to Dr. Fay the autopsy report. Really, I thought that she put it to him that -- I know that is not precisely what it said but I thought she put it to him the way Dr. Becker described, mainly that he was saying that this child died of SIDS.

MR. ROLAND: Well, certainly, if that is what she said, I misunderstood that.

MS. CRONK: Earlier, Mr. Roland, and it may have been a matter that wasn't heard fully, but I asked the doctor was it his understanding that the involved pathologists concluded --

THE COMMISSIONER: Well, let's put this question assuming the autopsy report of Dr. Becker had given the opinion that the child died



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of SIDS, do you want to change your last answer because, as I understand it, you are not excluding SIDS and you are not excluding digitalis toxicity either.

THE WITNESS: I have to pay attention and respect the opinion of an expert pathologist who has experience in the anatomic findings in Sudden Infant Death Syndrome. That has to be given great weighting.

The problem is that we are also dealing with a child who, having had no digoxin ordered, is found to have some digoxin post mortem and dies with arrhythmia which can also be the result of digitalis overdosage. So that although clearly SIDS is a strong possibility, it doesn't to my mind rule out the possibility that the child may have had an overdose of digoxin.

I don't think, in other words, Mr. Commissioner, and I am sorry that I can't be more specific or clear about this, but I don't think that one completely and utterly excludes the other consideration.

MS. CRONK: Thank you, doctor. I think your answer was most clear.

Mr. Commissioner?



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THE COMMISSIONER: Shall we rise

now?

MS. CRONK: Thank you, sir.

--- whereupon the hearing was adjourned at 4:30 p.m. until Wednesday, the 23rd day of November 1983, at 10:00 a.m.



